THE
MEDICAL AND SURGICAL
REPORTER.

No. 1885. PHILADELPHIA, APRIL 15, 1893. Vol. LXVIII—No. 15

ORIGINAL ARTICLES.

POSTURAL PATHOLOGY AND THERAPEUTICS IN OBSTETRICS AND GYNECOLOGY.*

WILLIAM B. DEWEES, A. M., M. D., Salina, Kansas.†

Hippocrates asserted that "accurate observation of facts, and correct generalization from them, forms the only rational basis of medicine," and so we are taught to-day. Grecian philology baptized man *anthropos*, the being with the upturned-heavenward-face. Throughout the animal kingdom the gift of bodily erectness is reserved to the human being alone. The dignity of the natural erect posture lies in the two following facts, namely: First, that by and through the primitive erect posture of his body, man is installed in his recognized lordship over the beast of the field; and second, that corporeal perpendicularity is both significative and comprehensive of physical healthfulness. Thus, it is manifest that the chief characteristic of anthroposophy is the philosophy of the erect posture.

Inasmuch as the prime object of addressing this august body of specialists is to present facts and to elicit truth by discussion in a given limited time, I must needs be brief. This object I will endeavor to fulfill by the light of general anatomy, common sense and experience, in calling your attention to the correct and the incorrect posture as related to uterine displacements.

Perpendicularity of the body is, mainly, the result of an equipoising of the upper half of the body upon the central part of the lumbar curve of the spine. This center in the lumbar curve is vertically supported on two equal bases—the femur heads— and by the aid of the mathematical diagrams (Figs. 1 and 2) is demonstrated to be the body's center of gravity. The body being equipoised upon this center, in both its axes, is literally pressed into symmetry by, and in the ratio of its own gravity. This balanced state of the perpendicular body is principally sustained by virtue of the normal tension of the spinal muscles, until the eqilibrium is broken by muscular or other disturbing force.

It will be observed, further, that the lumbar curve being in the body's centre of gravity, *i. e.*, vertically in line with the ankle and the ear, is not only the centre upon which is balanced the upper trunk transversely and antero-posteriorly, but that it is also at the same time the maintainer of pelvic obliquity. As such it is a fundamental point, since in the correct erect posture all decided movements of the upper trunk are derived from, and dependent upon, preceding opposite shifting of the lumbar spine. That is, neither bowing nor leaning backward can be ac-

*Read before the Western Association of Obstetricians and Gynecologists, Kansas City, Mo., December 7th, 1892.

†Vice-President of the Pan-American Medical Congress for Kansas; Ex-President of the Golden Belt Medical Society; Fellow of the American Association of Obstetricians and Gynecologists; Member of the Western Association of Obstetricians and Gynecologists, etc., etc., etc.

complished to a considerable degree without falling, unless the lumbar curve advances or retreats in the opposite direction. As the lumbar curve either advances or retreats from its central bearing, so will it, in the same ratio, increase or destroy pelvic obliquity by forcing the promontory of the sacrum to either ascend and advance, or retreat and descend, thereby compelling the pelvis to swing to a corresponding degree upon its base—the femur heads.

The philosophical conclusion of the aforesaid observation on the erect posture is, that the lumbar curve is the fundamental point and the spinal muscles the controlling source of both bodily symmetry and deformity. By a glance at Figs. 3, 4, 5 and 6, we have this truth fully demonstrated. Figs. 3 and 4 are photographs taken from life, and show typically the external form of the body in the correct (perpendicular) and the incorrect (stooping) erect postures as ordinarily observed in women. Figs. 5 and 6 represent, respectively, Figs. 3 and 4, showing their internal relations. As the model body, in both its external form and internal relations, is typically represented in the perpendicular and in the stooping postures, by Figs. 5 and 6, respectively, let us examine them somewhat in detail.

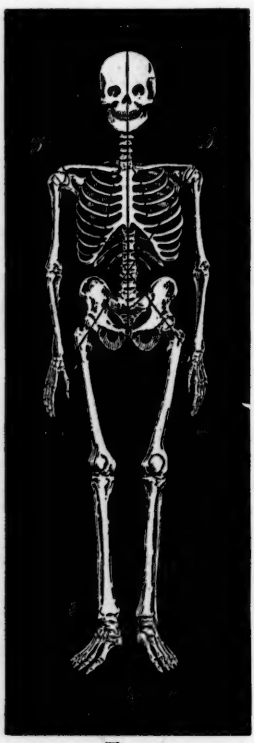

Fig. 1

Fig. 2

Fig. 3

In the correct erect or perpendicular posture (Fig. 5), we notice that the body is well balanced with due symmetry and order prevailing throughout involving important, anatomical and physiological considerations. Here we notice:

First.—That, by and through the advanced lumbar curve, in vertical line with the ankle and

In the incorrect erect or stooping posture (Fig. 6) we notice that a very different state of both the outer form and the internal relations obtains. Symmetry and order are destroyed, and deformity and disorder prevail, involving important pathological and therapeutic considerations. Here we notice:

First.—That by and through the retreated lumbar curve, considerably behind the vertical

the ear, and the normal tension of the spinal muscles there is a consequent natural tensity of the pectoral and abdominal muscles, with the dorsal and lumbar curves of the spine, acting reciprocally as neutralizing equivalents.

SECOND.—That the pelvis is forced to remain so swung upon the femur heads as to occupy an obliqne position, *i. e.*, the promontory of the sacrum is elevated and advanced, the pubes retreated and depressed, and the plane of the pelvic cavity comparatively vertical. Thus the intra-pelvic organs occupy naturally a position very largely below and behind the sacral promontory, and are thereby very considerably sheltered from superincumbent weight.

THIRD.—That the entire visceral weight of the abdominal organs rest mainly upon the pubes and the lower portion of the tense abdominal muscles, which maintain the viscera compactly elevated and coerced against the diaphragm, while the tense pectoral muscles advance and expand the chest. Hence there is a fullness of the chest together with largeness and rotundity at the hypochondres and the epigastrium with a firm state and trim form of the lower abdomen.

line between the ankle and the ear, and the abnormal laxness of the spinal muscles, there is a consequent unnatural laxity of the pectoral and abdominal muscles. The head and feet remain intact, while the middle of the body—the lumbar axis—has shifted, thereby destroying the reciprocal equalizing neutralization of the dorsal and lumbar curves. Thus the influence of gravity alone has caused the droop, because the axis has receded.

SECOND.—That the pelvis is forced to be so swung upon the femur heads as to occupy a horizontal position, *i. e.*, the promontory of the sacrum is retreated and depressed, the pubes ascended and advanced, and the plane of the pelvic cavity rendered comparatively and unnaturally horizontal, with its axis in direct line of the depessing influence of visceral gravity. Thus the intra-pelvic organs now occupy an unnatural and unsheltered position, being exposed to all the evil consequences of superincumbent weight.

THIRD.—That the distance between the ensiform cartilage and the pubes has been greatly diminished, the pectoral and abdominal muscles have become lax, through which the viscera have lost their support and are now left to gravitate in the pelvis, upon the intra-pelvic organs and through them upon the intra-pelvic nerves, arteries, veins and lymphatics. Hence there is now a contracted chest together with a narrowed and retreated state at the hypochondres and epigastrium, while the hypogastric and iliac regions are unnaturally full and tumid—the inferior abdominal cavity being greatly enlarged antero-posteriorly.

Having seen plainly, in the light of physiological law, that the strong spinal and abdominal muscles are the chief conservators of the natural erect posture and the normal visceral bearings; and, that a lax state of these same muscles is the main influence in the production of the unnatural erect posture and uterine displacements, we will now take a comprehensive and critical observation of the status of each part chiefly concerned in this class of cases, with a view to successfully restoring them to health.

As the destruction of pelvic obliquity and visceral weight, are the prime factors in the production and maintenance of uterine displacements, it follows as a simple truth that, to remove this influence, the first indication is to restore the primitive trunkal and visceral bearings. This

Fig. 4

brings us to consider the most essential and fundamental therapeutic means, namely: How shall we best accomplish this first step to a radical cure? *Can it be accomplished by medicine?* Evidently impossible; so testify the facts in history.

Will it be secured by rest in the horizontal posture? Not in the premises; is the verdict of the most sagacious observers. *Is the purpose effected by exercise?* The consensus of opinion of the most careful practitioners proclaim in the negative; for in most cases the unnatural lax state is

not the result of inaction from indolence, but from exhaustion under untoward influences. Hence exercise would be a direct injury, inasmuch as in a depressed state of the uterus the influence of muscular effort is downward.

Shall we obtain it by pessaries? Both experience and physiological law substantiate the fact that, in the main, pessaries are prejudicial; as at best they can only serve to crowd the uterus upward against the depressing force of visceral gravity. *Do we find it fulfilled by abdominal supporters?* Most decidedly not; as the influence of their action is only compressing and depressing in that they fail to restore the normal pelvic obliquity and tensity of the spinal and abdominal muscles, and allow the lumbar spine to remain receded behind the true axis of the body.

Thus, is manifested in a concise manner, that the foregoing measures,—the usual means offered by our text books and works of reference—are inadequate and unadapted, either alone or conjoined, to the physiological and therapeutical requisites

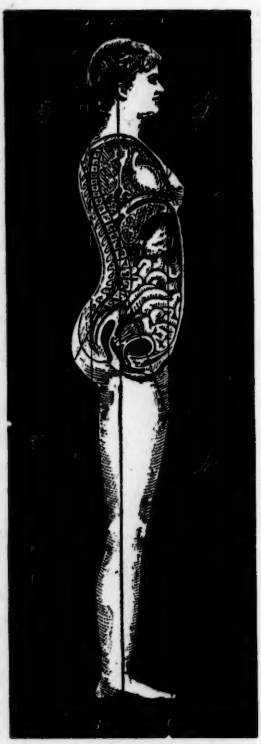

Fig. 5

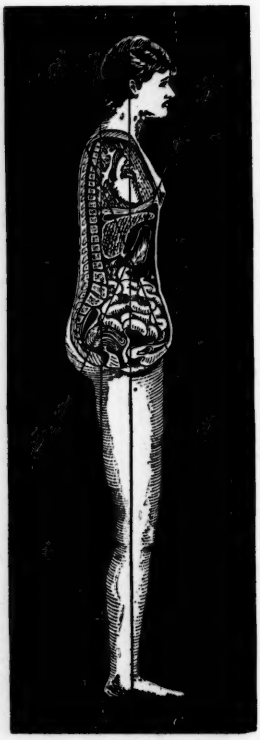

Fig. 6

Fig. 7

of a successful restoration of uterine displacements. Consequently, under the absolute necessity of obeying the physiological law, we find ourselves compelled to seek aid through some other means that will fulfill the therapeutic wants in this class of cases. The medium through which I have been enabled to successfully accomplish this desideratum, and to which I most confidently call your attention, is the ingenious contrivance shown in Fig. 7, manufactured by The Natural Body Brace Company of Salina, Kansas. Whenever I have properly applied this brace upon the body of a case of uterine displacement, wherein obliquity of the pelvis was destroyed by the lumbar curve being receded, together with a settled state of the upper trunk and a laxness of the abdominal muscles, I have invariably been successful in accomplishing a manifest immediate change from the unnatural to the natural erect posture, resulting in grateful expressions from the patient for the relief and comfort secured. The permanent good results obtained by the use of this

appliance in a large number of cases, have so convinced me of its valuable properties that I now look upon it as my chief reliance in the treatment of this class of cases. It will be specially noticed that its conjoined influence upon the lower abdomen and the pubes, as well as upon the lumbar spine and the shoulders, is such as to exert the requisite force to cause the upper half of the body, to become again equipoised upon the body's primitive centre of gravity in the lumbar curve, which is now again brought forward in the true axis of the body, while the pelvis is thereby forced to become so swung upon the femur heads as to occupy its natural oblique position. Thus by its bracing influence, the spinal, pectoral and abdominal muscles are aroused and aided to their normal tensity, whereby the primitive trunkal and visceral bearings alone can be restored and maintained.

In presenting these humble and mperfectly described observations on the philosophy of the erect posture and its influence as a therapeutic means in the rational treatment of uterine displacements for your kind consideration and discussion, I have earnestly endeavored to simply elevate a fundamental truth from the condition of a mere latent fact to that of an active principle; being at the same time mindful of the facts that "a good principle not rightly understood may prove as hurtful as a bad," and that "there is no falsity equal in mischief to that of truth when perverted and misapplied." As philosophy is ever true but may be misapplied, while established facts are always both true and scientific, the conclusion is warranted that any means whatsoever which most essentially aids in the foundation of a cure, should outweigh any opposing authority in our selection of remedies. It is the facts of important discoveries which usually appear first, and afterward their philosophy.

The truth to be kept foremost in mind is that there is such a thing as unerring language of nature in the human body, which can only be learned by observation. When this comes to be rightly understood it will greatly shorten our examinations, reduce our misjudgments and mistakes, gladden our hearts with more certain diagnostic and prescriptive criteria and elevate ourselves in our own eyes and in the eyes of suffering humanity.

DERMOIDS.*

JOSEPH PRICE, M. D., PHILADELPHIA.

I have made this choice of tumor because the complications are about always present. Sometimes simple, but usually extensive and aggravated. Commonly there are very general adhesions to all surrounding structures or viscera, requiring cautious, painstaking surgery. They have a marked tendency to suppuration and inflammatory action; and in dealing with these cases there is needed a prolonged experience with suppurative forms of pelvic disease. Many of these cases are neglected, or go unrecognized until the patient demands relief at the hands of some specialist.

Dermoids are commonly small, their contents mixed and filthy. Occasionally fluid occurs in considerable quantities. In considering this subject I shall quote freely from that eminent pathologist, Mr. Bland Sutton, primarily for the reason that my own observations, the deductions of not a few experiences, are confirmed by his clear, concise, logical discussion of the subject. He has done much to help us out of our ignorance and confusion on the subject of dermoids. He has gone very far in settling for us their origin, the puzzling question of their pathology, the causes of development, their size, contents, etc.

He says: "The cysts which arise in connection with the ovary and parovarium may be conveniently arranged in three groups, according to the region in which they happen to arise:

"(1) Oöphoron, unilocular cysts, multilocular cysts, cystic corpora lutea, dermoids.

"(2) Paroöphoron, papillary (proliferous) cysts.

"(3) Parovarium, parovarian cysts,

*Read before the Obstetrical Society of Philadelphia.

pedunculated cysts hanging from the broad ligament.

"My first efforts were directed toward ascertaining the relation of dermoids to these three regions of the ovary. In all the examples of ovarian dermoids dissected for the purpose, it was easy to demonstrate that the parovarium was unconnected with them, but in several cases this structure differed in minor particulars from the usual arrangement of the tubules. Another interesting fact was the frequent association of malformation of the Fallopian tube with dermoids. In some cases there was an accessory abdominal ostium; in others the tube would have no abdominal opening whatever.

"These conditions have but little bearing on the pathology of ovarian dermoids, for they seem to be quite as frequently associated with other forms of ovarian cystomata. It now became necessary, seeing that ovarian dermoids have no connection with the parovarium, to ascertain as far as possible to which district of the ovary they belong. When a cyst attains a large size this task is an impossible one, but in dermoids of the size of a walnut, and sometimes when they are as large as an orange, it is easy to show that they originate in the oöphoron, and a series of observations carried out for this purpose has had the result of convincing me that ovarian dermoids arise in the same portion of the ovary as multilocular cystic tumors. These cysts arise in the Graafian follicles, and it is my intention to proceed to show that ovarian dermoids also arise in these follicles. Having localized the situation of ovarian dermoids to the oöphoron, the task became simple but laborious, for it involved a large amount of histological work.

"When an ordinary oöphorite cyst is compared with a typical dermoid the difference is very striking. In the simple non-dermoid ovarian cyst we find the interior lined by a single layer of flattened epithelium, and this may be difficult of detection. The dermoid, on the other hand, may present skin, hair, sweat and sebaceous glands, teeth and even a mamma.

Should the non-dermoid ovarian cyst be multilocular the individual cavities may, if not too large, present a membrana granulosa; in the dermoid the loculi are lined with skin, furnished with hair, etc.

"It may also be mentioned, as tending to show the close connection between ovarian glandular cysts and dermoids, that it is no unusual thing to find mucous cysts in the smaller loculi in the walls of dermoids. We must now proceed to consider the simplest form of an ovarian dermoid.

"If a cyst in the ovary presents the smallest piece of skin, furnished, perhaps, with only two or three hairs, its dermoid character is established. The presence of a tooth without any skin is sufficient. As a matter of fact every gradation may be traced from the membrana granulosa of an ovarian follicle to the glandular cutaneous lining of a dermoid. In some specimens the epithelial investment is indistinguishable from that lining an unilocular cyst. Yet in one small portion of the cyst wall a few hairs on a patch of skin place them in the category of dermoids.

"Thus far we know that ovarian dermoids resemble non-dermoid ovarian cysts in that they usually consist of one large cyst surrounded by numerous smaller ones. We have already seen that a multilocular cyst of the ovary may present only one tiny patch of dermoid tissue, though the tumor is composed of a multitude of cavities, great and small. There are good grounds for the belief that if all multilocular ovarian tumors were systematically examined patches of dermoid tissue in the cyst would be found to occur with very great frequency. Lastly, an ovarian dermoid may be multilocular, all its cavities presenting skin, hair, or teeth, or all three structures in the same cyst.

"Thus in the general disposition of the cavities, single, multiple and mixed, dermoids and non-dermoid ovarian cystomata are in agreement. The most highly-organized ovarian dermoids are those which contain a well-developed mammary gland capable of secreting a fluid resembling milk.

"In order to obtain teeth in a cyst lined with mucous membrane we need calcify some of the cellular projections, and a dermoid is the result. Calcific patches and cartilage are not peculiar to dermoids; they have been seen in non-dermoid ovarian cysts. Finally, although there are striking differences between simple ovarian cysts and complex dermoids, nevertheless the difference between a complex ovarian cyst and a simple der-

moid is practically *nil*, and, as a matter of fact, the glandular ovarian cysts are often structurally more complex than many dermoids, and I see no escape from the conclusion that *ovarian dermoids, like oöphoritic cysts in general, originate in Graafian follicles.*

"It must be borne in mind that a distinction exists between dermoids occurring in such situations as the angle of the orbit, tongue, neck, etc., and ovarian dermoids."

So interesting and important in our surgery is the subject of dermoids that we will collate the best of modern authority, this with a sense of certainty that too much light cannot be thrown upon a subject which has been, and is yet, involved in not a few doubts.

Pozzi, p, 100, Vol. II.

Mixed tumors, as well as dermoid cysts, often ossify; but a study of their structure emphasizes the interesting fact that the fragments of bone are not necessarily situated near the dermoid cyst, but may, indeed, be quite independent of them.

Pozzi, p. 121, Vol. II.

The frequency with which purely dermoid cysts are met in certain parts of the head and neck is well known; on the other hand, the complex tumors called teratomata are often met with at other points (sacral region, anterior mediastinum, palatine arch).

Pozzi, p. 121, Vol. II.

Velitz, of Budapest,* reports a curious case of dermoid cyst with a mamma. Woman, aged forty years, who had borne twelve children. Ovariotomy was performed for a dermoid cyst containing oily matter mixed with white hairs; upon the internal wall was found a sort of mamma as large as a child's fist; a little milk resembling colostrum was squeezed out from the nipple. The areola was pink, and surrounded by a circle of hairs.

Pozzi, p. 121, Vol. II.

In the Museum of Clinical Gynecology at Halle, there is a piece of a dermoid cyst taken from a goose, and containing several feathers.

Pozzi, p. 121, Vol. II.

Baumgarten, *Virchow's Arch. f. Path. Anat.*, Bd. CVII, 1887, p. 515. The finding of retinal epithelium has already been reported by Marchand, *Bresl. Arztl. Zeitschr.*, 1881, No. 21.

Pozzi, p. 121, Vol. II.

A. Fränkel, Ueber Dermoidcysten der Ovarian, und gleickzeitige Dermoide im Peritoneum, *Wiener Med. Wochenschr.*, 1883, No. 28, *et seq.*

Pozzi, p. 96, Vol. II.

They are usually small, but they may become voluminous by uniting with proligerous cysts, or even in consequence of acute inflammatory attack which suddenly increases their fluid contents. Though they may be long unrecognized, and perhaps revealed only by chance at the autopsy, as they begin (p. 97, Vol. II) to enlarge they approach, from a clinical point of view, the ordinary proligerous cysts that I have just described. Poupinel has gathered data in regard to forty-four cases where both ovaries were *transformed* into dermoid cysts. (See Thése de Paris, 1886, Poupinel.)

They are much less frequent than proligerous cysts.

Olshausen collected statistics of 2275 cases coming from a series of (operations) ovariotomies performed by Spencer Wells, Keith, Schroder, Krassowski, A. Martin, Billroth, C. v. Braun, Esmarck, Dohen and himself. Out of this number there were only eighty dermoid cysts (3.5 per cent). Their internal surface is covered with a membrane which looks like the skin, and which has a similar structure; we may see on it a corneous layer formed of several layers of flat and thin spheroidal cells, like those of the rete Malpighii.

Pozzi, p. 97, Vol. II.

A panniculus adiposus separates the dermic layer from the fibrous capsule of the cyst. Upon the surface of the derma are papillæ which may look like nipples, and some hairs which are inserted into hair follicles occasionally provided with a sebaceous gland; the latter were first demonstrated by Friedländer.

Sudoriparous glands are also found. The hairs whether free or implanted, are long, tawny, agglutinated together by sebaceous matter, and sometimes rolled into little balls.

Sebum, resembling the vernix caseosa, partly fills the cavity, and often forms small, isolated masses; it is sometimes oily in consistency, and contains many epithelial cells, cholesterin crystals, and fatty acids.

*Archiv. f. Path. Anat. und Phys. und Klin. Med. Bd. CIII. Heft 3.

Teeth and bones have been found in these cysts; bones are inserted in the wall, and more or less covered by the dermic layer (Pozzi, p. 98, Vol. II.); they are irregular in shape, usually flat, and formed of compact tissue; cartilage is present in small patches, which, according to Labbé and Verneuil, sometimes articulate by means of intervening fibrous bundles.

The teeth project into the cavity, and are often loosely inserted into alveoli formed of bony débris. They are never perfect in shape, and cannot be absolutely identified as incisors, canines or molars; the cement is usually absent.

Pozzi, p. 98, Vol. II.

Hollaender makes the interesting statement that the teeth are always placed with crowns sloping toward the median plane of the body, so that an examination of the cyst cavity will always determine the side of the body upon which it originated. As many as a hundred teeth have been found in one cyst (Schnabel).

Autenrieth describes a case where 300 teeth were taken out of a cyst which contained even more.

Some writers claim to have found carious teeth, but, as Lannelongue observes, Magitot is probably correct in thinking that this is not really caries, but a phenomenon of wear and absorption.

P. Ruge found in a dermoid cyst just below a bone which resembled the inferior maxillary with its molar teeth, a small mass which in form, size acinous structure had every appearance of a submaxillary gland.

Pozzi, p. 99, Vol. II.

Unstriped muscle fibres have been found in the dermic layer (Virchow); as to the striated fibres, Olshausen denies their existence, saying that where they are found the case is probably one of teratoma instead of dermoid cyst. In truth, many authorities confuse the two.

Pozzi, p. 99, Vol. II.

Cruveilhiér quotes a case where nails were found; Baumgarten reports a most remarkable case where the cyst, besides skin, hairs, and teeth, contained a body which resembled an eye, with a species of convex cornea and epithelium like that of the retina. There was also a mucous membrane similar to that of the intestines and stomach, and encephaloid nerve substance.

The presence of gray matter in dermoid cysts is a knotty point. In one case Virchow found gray matter, laminated as in the cerebellum; Key found some enclosed in a bony cavity; Rokitansky, in a species of capsule near a bone; other pathologists have, in exceptional cases, found nerve filaments supplying the teeth (Mahot and Legros.)

Pozzi, p. 100, Vol. II.

Besides these solid substances, dermoid cysts contain a milky fluid, in which are often chlosterin crystals.

Mixed tumors, formed by a combination of dermoid with other forms of ovarian cysts, have long been known (Lébert, 1857).

The subject has recently been studied by Pouperial (*Thése de Paris*, 1866), who states that in one and the same tumor we may find in closest union dermoid cysts and cysts with pavement epithelium, cubical ciliated, goblet, polymorphous cells. etc. More than this, in the same cystic cavity we may find the epidermis with its appendages (hairs, sebaceous and sudoriparous glands), and a lining of uniform or polymorphous epithelium. Finally, the interior lining of the cavity may be entirely formed of skin, which may, however, be incomplete. In some instances the cutaneous lining is found in a few places only of the dermoid cavity, and may be in the form of large papillæ, into which are implanted the hairs. The rest of the cyst wall is smooth and fibrous, or else looks more mucous than cutaneous.

Regret that thorough histological examinations of so-called dermoid tumors are rare. Were they more frequent it is probable that many cases of so-called dermoid cysts would be classed with mixed tumors. The fibrous stroma is usually formed of young connective tissue, of adult or myxomatous tissue. Yet, besides teeth which are produced from the ectoderm, and are met with only when there is a cutaneous lining, we find cartilaginous and bony tissue in the fibrous walls of mixed tumors. It may also be seen in tumors which possess no dermoid characteristics.

Poupinel reports an example of a mucoid cyst of the ovary, followed by the

appearance of cysts of the same nature all over the body; cartilaginous nodules found in its walls.

Both ovaries may be simultaneously affected. In that case, as in the case of unilateral ovarian tumors, combinations of every variety of cyst may occur. Every ovary may contain an epithelial mucoid tumor, with polymorphous epithelium or epithelium of one kind alone.

For instance, both cysts may be lined with ciliated epithelium (Brodowski, etc).

Pozzi, p. 101, Vol. II.

Oftentimes both ovaries are transformed into mixed tumors (Flesch, Neuman, Poupinel).

There may be a dermoid cyst upon one side and a mucoid cyst upon the other (Lebert, Young, Herchl, Mugge, etc.), or a mucoid cyst on one side and a mixed tumor on the other (Poupinel).

Pozzi, p. 101, Vol. II.

The question of *origin* of dermoid cysts is one of the most obscure points in general pathology.

The theory which ascribes them to *extra-uterine pregnancy* scarcely deserves mention, since they are often met with in children.

The theory of *diplogenesis* by fœtal inclusion is also inadmissible, and is at once disproved by the great number of teeth present.

The term *plastic heterotopia*, used by Lebert, is no explanation, but merely a name.

There are a few more tenable theories; that of *parthenogenesis*, which considers their formation due to a proliferation of germinating epithelial cells, is not satisfactory, because it fails to account for the presence of similar growths in other parts of the body where there is no epithelium.

The theory of *impaction*, although not beyond criticism, is on the whole the most satisfactory. According to this view, during intra-uterine existence certain portions of the blastoderm become impacted by pressure within the tissues, and develop there later, giving rise to an irregular formation of the normal tissues. Verneuil was the first to formulate this ingenious theory in regard to cysts of the branchial clefts of the neck and head (1883).

The demonstrations of his in regard to the axis cord, from which he claims that the genital organs are developed, assist us in understanding the complexity of the elements found in dermoid cysts of the ovary. The organs which are formed by all the layers of the blastoderm are the only ones which take part in the formation of the axis cord. It is impossible by dissection to identify the different germinative layers; we can easily imagine, therefore, that portions of tissue corresponding to the corneous layer, the medullary tube (ciliated epithelium), or the middle layer (muscle, bone), may become misplaced in the ovary as in the testicle. The impaction receives strong corroboration from these researches. (Olshausen, *Die Krankheiten der Ovarien*, Stuttgart, 1886, p. 404.

Lannelongue* adopts (impaction) it unreservedly. He calls attention, moreover, to the fact that the development of these tissues, foreign to the parts in which they are situated, brings about certain modifications in the structure of the latter, which add to the complexity of the abnormal growth. Perhaps this may explain the union of proliferating ovarian cysts to dermoid cysts, and the various transitional stages in these neoplasms. Still, Lannelongue does not entirely reject the idea of *diplogenesis* in cases where fœtal remains are found in cysts, which he terms fœtal cysts. He considers them to be combinations of cysts and double monsters; the cause giving rise to the production of the monster being intimately associated with that which determines the formation of the cyst. One or the other may predominate, according to the case; the higher we go in the series the more does the element of the monstrosity predominate, and the more does the cyst element tend to diminish and disappear. Thus, in the genesis of these tumors there are two factors to be considered: (1) the production of cystic cavities, and (2) the existence of a centre of supplementary development. To admit the existence of this (secondary) independent centre is to satisfactorily account for the complex character of these neoplasms, but it must be confessed that the admission creates problems quite as difficult of solution as those which it destroys.

*Traite des Kystes Congenitaux, Paris, 1886.

Thomas and Munde, p. 667.

In various parts of the body, orbit, floor of mouth, brain, eye, anterior mediastinum, lungs, mesentery, testicles, ovaries, peculiar cysts containing fat, teeth, hair, cholesterin, cartilage, bone are sometimes found. Their walls give evidence of the existence of sweat glands, sebaceous follicles, papillæ and an inverting epithelium, so that the microscopic appearance of the walls resembles closely that of skin. Many fanciful theories are given as to the origin of these peculiar growths. It is believed that they are the result of an irregular and eccentric development of the tissues of the fœtus during intra-uterine life. It was Lebert who advanced the theory that from the elements present spontaneous generation of a portion of skin occurs, and this being given we have, as Dr. Farre expresses it, "the basis out of which many of these products spring."

M. Pignè has analyzed eighteen cases with reference to the *period of life* at which they were found, with the following results:

5 existed in virgins under 12 years.
5 " " children from 6 months to 2 years.
4 " " the female fœtus at term.
3 " " fœtuses cast off at the eighth month.

Vary in size from a hen's egg to adult head, rarely larger. Are hard and generally globular. One ovary is usually affected and by only one tumor, but instances are on record where a single ovary contained several dermoids.

Thomas and Munde, p. 669.

Out of fifteen cases of dermoid cysts operated on by me, in three both ovaries were affected in this manner. One of these three women was pregnant at five months; from another, a single woman, 39 years old, I removed a switch of hair 2½ feet long, which after dissolution of fat contained in it by immersion in ether, it lengthened to 5½ feet.

Innocuous in themselves, not likely to increase rapidly or to attain great development, they sometimes set up very serious and even fatal disturbance by one of three methods: (1) suppuration and consequent abscess; (2) by perforation and discharge into peritonæum; (3) by cyst containing dermoid elements, secreting fluid and changing its character to that of a fluid tumor.

Out of 150 ovarian tumors removed by me, four were large cysts having as bases dermoids containing fat, hair and bone. In these cases the cysts containing the dermoid elements were not in communication with the large cysts filled with fluid colloid which constituted the mass of the tumor. In two cases the tumor was nearly removed when a cyst filled with fluid, fat, etc., was opened into. The large cysts appeared like ordinary multilocular cysts.

Often discovered by accident only. Often movable. Their tendency to inflame spontaneously.

Thomas and Munde, p. 670.

Produces pain and even elevation of temperature, which leads to their discovery, or their pedicle becomes twisted, or they are bruised accidentally.

Janvrin (of New York).

A bunch of hair protruding from rectum led to the discovery; patient pulled away hair; some years later her abdomen began to swell; two ovarian tumors diagnosed; on removal both proved to be dermoids, one of which had perforated into rectum.

Pelvic abscesses have been proven to owe origin to dermoids by hair, etc., escaping from sinus of supposed abscesses into vaginal vault (posterior). Should be removed by laparotomy as soon as discovered. Three chief periods in female life which seem to excite the dormant growth of dermoid tumors of ovary: (1) puberty; (2) martial relations; (3) pregnancy and parturition.

Greig Smith, p. 114

About one in ten ovarian tumors entirely or partially dermoid. Exact origin uncertian. Generally admitted that rudiments of all dermoids exist at birth, and that they remain quiescent indefinitely, or start into active growth at any period from or *before* birth to old age. Dermoid ovarian growths most frequently manifest themselves after puberty.

Greig Smith, p. 115.

Dermoid cysts is usually divided by septa into separate portions; and the contents may differ in various loculi.

The main cyst often contains a greasy, chocolate-colored fluid, while the others

are full of the characteristic sebaceous material.

Most striking contents are pieces of true bone, most frequently stunted alveolar processes.

Sebaceous follicles in the cyst-wall frequently attain to the dimensions of secondary cysts, and a similar development may take place in the sweat glands.

Malignant tumors have been found growing in dermoid cysts. (Bristol Infirmary; woman 59 years old; suppurating dermoid, in wall of which a solid sarcomatous growth, as large as a hen's egg. No secondary, malignant development in woman as yet.)

More than one observer has noted that malignant tumors of the abdominal cavity sometimes follow removal of dermoid cysts; no doubt the primary elements existed in the dermoid growths.

Both ovaries are liable to be diseased in a proportion of cases larger than in cystoma.

Ordinary glandular cystic disease is found to co-exist with dermoid cysts in a proportion of instances larger than would be likely if it were mere coincidence. Any casual connection between the two is not likely to be more than a stimulus to development started by increased vascular supply from the one which first began to take on diseased action.

Greig Smith, p. 116.

The *outer aspect* of a dermoid cyst is different from that of an ordinary cystoma. The glistening, pearly aspect of the latter is replaced by a muddy or opaque appearance, darker in color, sometimes approaching brown.

Adhesions are common in dermoid cysts, chiefly because they are liable to become inflamed.

Surgery of itself, in all abdominal work, to be successful must be clean, rapid, positive and direct of purpose. There should be no bargaining with chances, nothing begun in doubt, and it should be carried through to a finish with mathematical strictness in every detail. Rapid, deft surgery gives the best results throughout all surgery, special and general; it minimizes the harmful results of exposure and manipulation.

Short anæsthesia never waterlogs a patient. I am satisfied that a number of patients die from prolonged anæsthesia and the slow, hesitating and sluggish steps of the operation. Death will rarely follow a short anæsthesia and an operation shortened by a deft sweep and dextrous manipulation. We have rapidity of operation as an essential. Those who have had many surgical experiences, whether abdominal, pelvic or general, and have failed to consider time as an important element, have equally failed to carefully study many important phases in their surgical experiences and note the causes of their varying results. The rationalé of this must be plain to all. We have this one undisputed truth amid the many confusions the strong light of modern surgery has not yet driven out.

During these surgical procedures you cannot enjoy the delights of the aroma of a Wheeling stogie while you discuss a glass of Kentucky best and the advantages of the annexation of the Sandwich Islands. There should be the very perfection of cleanliness before, during and after operation, that extending to every detail and appliance and combined with the utmost simplicity of method. I would not place special stress upon any particular period of treatment, each and all should be regarded as having a peculiar importance—the one preliminary to, the one during, and that subsequent to, operation. So interwoven—interdependent—are the requirements of each that it would be difficult to give to one a distinctive importance over the other.

From the moment the patient comes under the surgeon's hands there begins that thoughtful, deliberate, skillful treatment, that conscientious exercize of sound surgical judgment, that attention to every phase and need of the case through all its periods until the patient passes from under his hands relieved or cured of her affliction. The neglect of the essential in any one period may be fatal in result, however skillful and successful the treatment through other periods.

There can be no distributing the responsibility so as to give more weight to one period than another. The entire freight of responsibility comes to you with the patient, and remains with you only to go out with her.

In every case the essentials of treatment, down to the most minute lines of detail, should be mentally mapped out, and these lines followed by the surgeon with

geometrical precision, and always with a ready and swift reserve at command for any and every masked trouble. If there are brilliant feats in abdominal surgery it is when an unsuspected or concealed enemy is uncovered and dealt with successfully. It is readiness for the trouble that lurks in ambush that goes to make up the successful surgeon. With our advances we will go on with our profitable discussion of essentials, reaching more uniformity of methods through that most determining of all influences—the death rate. I will in brief review some of the essentials, as I consider them from the standpoint of my experiences. Irrigation is an important essential, and should be scrupulously practiced to the point of great thoroughness in all cases where pus, clot and debris are found. The escape of the contents of any form of cystoma into the peritoneal cavity—the evacuated contents of dermoid tumors, pus tubes or ovarian abscesses, or of any variety of pelvic growths—should be followed by a thorough washing toilet. With each repeated experience I grow more confirmed in the conviction that drainage is an important step in assuring speedy recovery.

My experience with great numbers of angry troubles strengthens my confidence in drainage; of course, it is important to know when and how to use it. The man who tells us that he cannot remove the ovaries entire also tells that drainage is excessively used. Another tells us that drainage is harmful, and that he never operates for pus.

The resources of our surgery have been greatly added to by our improved instruments and materials. A large share of our surgical success is due to good instruments and pure materials, allied with trained, vigilant nursing. The best work is done with few and simple instruments and the best quality of pure material. For tying, silk, pure Chinese twist, the purest and best in quality and the finest and least possible, consistent with safety, should be used. Silk-worm gut, of strong, clean material, gives gratifying results. It is non-irritating, and forms a beautiful angle or box suture for the abdominal walls. There should be three or four to the inch, passed with care, including more aponeuritic and muscular wall than silk and peritonæum. We will speak of the character of the after-treatment without giving it a distinctive importance over any other period of the case. The required after-treatment is simple. Absolute rest, with patient on her back for thirty-six hours or longer, shifting position or restlessness not to be encouraged; clean, painstaking nursing; there should be relays of nurses, that the watch over the patient may be vigilant and unremitting. The nurse should be governed by the same keen sense of responsibility that should govern the surgeon. The patient's bowels should be kept soluble. No opiates at any time. Light and simple diet after the second day.

The triple alliance against good and successful surgery is delay, tinkering, which includes in its arsenal opium, and dirt.

Baron Rothschild's Business Maxims.

The elder Baron Rothschild had the walls of his bank placarded with the following curious maxims:

Carefully examine every detail of your business.

Be prompt in everything.

Take time to consider, and then decide quickly.

Dare to go forward.

Bear troubles patiently.

Be brave in the struggle of life.

Maintain your integrity as a sacred thing.

Never tell business lies.

Make no useless acquaintances.

Never try to appear something more than you are.

Pay your debts promptly.

Learn to risk your money at the right moment.

Shun strong liquor.

Employ your time well.

Do not reckon upon chance.

Be polite to everybody.

Never be discouraged.

Then work hard and you will be certain to suceeed.

Johnnie—"Tom, your mother says you are taking Cod Liver Oil. "What are you taking it for?"

Tom—"Medicine! did you think I was taking it for fun?"

COMMUNICATIONS.

THE ADMINISTRATION OF ETHER FOR SURGICAL OPERATIONS.

ELLISTON J. MORRIS, A. M., M. D., PHILADELPHIA, PA.

The death of Col. Shepard, during the administration of ether must awaken the profession to a renewed sense of the responsibility assumed in the use of any anæsthetic for any operation, no matter how slight. It is not the writer's purpose to criticise in any way the administrator of this unfortunate case, but simply to lay down a few simple rules for ether administration which have stood him in good stead in times past, and which he hopes may be of use to others.

It may be stated as an axiom that any agent which destroys sensibility is dangerous and should be carefully guarded in its use. The ideal anæsthetic, which will render the operation painless while the brain remains clear, and without danger to the patient, has not been discovered and probably never will be; but we can throw such safeguards around our administration of anæsthetics that the danger is reduced to a minimum. There will always remain a certain proportion of cases in which the death is absolutely unavoidable, and which can hardly be charged to the anæsthetic, though that may be the exciting cause. The writer can well remember an instance that occured to him. He had been asked to administer ether for an abdominal section; the operation was delayed a quarter of an hour for the arrival of the family physician, and in that time the patient had an overwhelming apoplexy and died. No ether had been given, but, had the death occurred during its administration, no one could have said that it was not the cause, directly or indirectly from increased tension on the blood vessels.

The XII Commandment, "Mind your own Business," is the golden rule for the anæsthetizer. He should have eyes, ears and hands for his own work alone, and to expect him to assist the operator in any way beyond giving his undivided attention to the ether, is to subject the patient to danger which should never be incurred. His eyes ought never to go below the patient's chest, and strict attention to the patient's condition, breathing, pulse and the depth of unconciousness will prevent the occurrence of those cases where "the surgeon nearly had a death on the table."

For the administration of ether, nothing is better than a soft towel, folded into a square of about eight inches, or several thicknesses of cheese cloth about the same size. By catching the folded towel at opposite sides it can be held in such a way as to form a cone giving room for the ether to vaporize above the patient's face. It is not the amount of ether poured on the towel, but the amount of ether vapor that the patient inhales that renders him unconscious, and hence the necessity for the space above the face for the vaporization of the ether. I have often seen the anæsthetizer hold the towel close down to the patient's face and pour on ether, wondering why the patient struggled and did not become unconscious, when raising the towel slightly would have remedied the matter. The folded towel has the advantage over every other form of ether inhaler in that it can be had in every house, no matter how humble, and is always clean. A fresh one can be substituted without trouble if the first one becomes soiled by vomit, which cannot be done with any form of inhaler. Usually the patent inhalers used in our hospitals, are foul from the vomit of many patients and it is almost an utter impossibility to keep them clean. The objection to the towel—that it requires more ether than the inhaler—is, to the writer's mind, more apparent than real and should not be allowed to have any weight in the matter.

Patients are often extremely nervous about the ether and dread it much more than the operation itself. If the anæsthetizer will begin its administration gradually, at first allowing plenty of air to reach the patient and thus avoiding the distressing irritation of the larynx, he will find that his patient falls into a quiet sleep, hardly knowing that unconsciousness is coming. A good plan with the very nervous is to place the towel over the face

dry, encouraging the patient to take deep inspirations, adding the ether, at first drop by drop, and increasing the amount as the patient becomes more used to its presence. The towel need not be removed from the face as the ether can be shaken between the folds. A few gentle encouraging words and the assurance that everything is all right, will to a great degree ward off the period of excitement.

The cough in its early stages is distressing and can be avoided by giving a few drops of fresh ether frequently, at the same time ordering the patient to take full inspirations. Vomiting will be avoided by directing that the patient have no breakfast on the morning of the operation or, if some nourishment must be given, it should be very light and consist entirely of liquids.

In spite of every precaution, the stage of excitement may be very severe and the patient require the combined strength of etherizer and nurse to keep him in bed. Particularly is this the case with those who are accustomed to use alcohol to excess, and who, it may be, have taken a "bracer" before the surgeon's arrival. Great care is to be taken in these cases that, on account of their struggles, they do not inhale more ether than is intended and suddenly plunge into the most profound stage. The etherizer should be on his guard to prevent such an occurrence by allowing the patient a little fresh air, and not pushing the ether too hard when the patient shows signs of relaxation.

The surgeon should be entirely prepared for the operation before the administration of ether is begun, so that when the patient is unconscious he can at once be placed on the table and the operation performed. Time is saved and the quantity of ether is lessened. Indeed, where the patient is in bad condition for the operation, he may often be put on the table before the stage of surgical anæsthesia is reached, in order that the surgeon may take advantage of the earliest moment at which he can commence the operation.

All through the operation the color of the patient and his respirations should be carefully observed. The peculiar bluish color, which comes at times, is a sign that the blood is not receiving oxygen enough and fresh air is urgently required. The breathing should be regular and deep as if the patient were asleep; snoring, or blowing breathing, with puffing out of the cheeks, shows that the centres of respiration are being invaded and calls for fresh air. The pulse cannot be taken as a guide as it will only show the amount of shock present.

It should be the aim of the anæsthetizer to keep the patient in a state between coma on the one hand and muscular resistance on the other. This is only to be attained by close watching of the patient. The ordinary rule of testing the degree of anæsthesia by the sensibility of the conjunctiva will answer in most instances, but in others will fail entirely. The same is true of the test by the reaction of the pupils to light. Perhaps the best rule is that mentioned in a recent editorial in THE MEDICAL AND SURGICAL REPORTER on the subject. It consists in noting the effect of the addition of a little fresh ether. If it causes no effort at swallowing on the part of the patient and no irritation of the throat, the anæsthesia is deep enough; but if such irritation be present ether can be given till it ceases. Beyond that point it is not safe to go.

During the administration of ether, and after the operation until the patient regains consciousness, the mouth and fauces should be kept clear of all mucus and vomit. It is hardly necessary to say that false teeth should be removed before the ether is administered. It is better that the anæsthetizer should personally inspect the patient's mouth and satisfy himself that there are no false teeth or other foreign body present. Patients are sometimes singularly averse to having the fact known that they wear false teeth and if simply asked the question will deny their ownership. If they are present they may drop down into the fauces and give annoyance if they do not lead to serious mischief. Snoring may be prevented by placing a thumb under the angle of the patient's jaw on each side and pressing it gently forward. The same can be accomplished by carrying the head into a state of extension. Snoring should, however, be watched as it is a valuable sign that the etherization has been pushed to its safe limit.

As has been said, the anæsthesia should be as short and quick as possible, and time can often be saved by withdrawing the ether as soon as the cutting part of the operation is completed and before the su-

tures are introduced. In the majority of cases the patient will not regain consciousness till the stitches have been placed and tied. The cardinal rule in all operations is the minimum amount of time and the least quantity of ether. Deaths after operation are often charged to shock where it were better to tell the truth and put the fatal blame where it belongs—to drowning with ether.

After the operation the anæsthetizer should remain with the patient till he has regained full consciousness, as cases are on record where the patient has been wheeled into a side room in the hospital, and choked to death because he had not consciousness enough to enable him to eject the accumulated mucus from his mouth. Should vomiting occur the best plan of treatment is to administer hot water as soon as the patient is able to swallow.

It has been the writer's good fortune never to have seen an ether death, but, where a fatal result is threatened, he would lower the patient's head and begin artificial respiration immediately, continuing it for hours if necessary, and administer strychnia hypodermically. Alcohol if given at all should be used with great caution.

It can easily be seen, therefore, that any old woman from the neighborhood cannot be safely trusted with the administration of ether. On no one, not even the operator himself, does the success of the operation depend more than on the anæsthetizer. In one sense he is like the engineer at the throttle. He must "give the machine" a little more steam climbing the grades and an ease-up on the descents, always keeping a lookout ahead for danger signals. When the cautionary signal comes he must be prompt to heed it. Accidents may come. Nature in rare instances may fail to show the red flag, but it will never be an excuse for the engineer controlling the anæsthetic, to plead "I did not see it till too late to apply the brake."

UTERINE FUNGOSITIES.

LEWIS SCHOOLER, Des Moines, Iowa.*

I have chosen this subject on account of its importance and the brief attention given to it by gynecological authors. What I will have to say will have little or no reference to text-book phraseology, and will little more than record my experience, which in no way, probably, differs from that of anyone present to-day.

But most of you may have been forcibly impressed by the length of time the growths have existed in many uteri, by the many diagnoses that have been made, and more than surprised that some of these have been made by men at whose hands we would have expected better things.

If the woman happens to be forty or more years of age, the most frequent diagnosis that I have heard of is change of life. This seems to be the cloak beneath which lurks most of the diseases to which womankind is liable.

That there may be eccentricities of menstruation at or about this period of female life, is more than probable, but that there is a continuous flow of blood for two or three years, to such an extent that the patient is unable to tell when the time for menstruation has arrived, I do not believe. And yet I have heard these stories and seen these cases by the score.

Many of our teachers in our colleges no doubt fail to give due prominence to the strictly practical and sometimes annoyingly common gynecological diseases.

The average medical student of the day is hardly satisfied with a gynecological clinic that does not afford a laparotomy, a hysterectomy or some other capital operation which not one in fifty of them will ever more than witness; and to these wishes too many of our teachers are liable to submit, unconsciously I grant, but nevertheless, it is a yielding that is detrimental to the interests of teacher and student alike, and, if it ended here, there would be little need of reform. But when we consider the suffering entailed upon helpless wo-

*Transactions of the Western Association of Obstetricians and Gynecologists.

men who have a right to expect relief at our hands, it assumes an entirely different aspect.

Fungosities may be malignant or benign. Most frequently they are of the latter variety, but the former are of sufficiently frequent occurrence that it behooves us to be constantly on our guard, and in some cases long observation and frequent examinations are necessary to determine the exact pathological condition, they being so near the border-line that it is difficult to say on which side they should be ranged.

The histological elements are of such a character that a microscopical examination will, it is true usually determine the character; provided the benign do not, as so frequently occurs in other growths, gradually become transformed into the malignant. The periodical congestions of the sexual organs at least conduces to a continuance of existing departures from normal conditions.

These growths are frequently little more than simple exuberant vegetations, which may or may not be complicated by the existence of polypi. When such complications exist a careless examiner may hastily conclude that the polypus is the only source of the hemorrhage.

In one of my own cases I found a polypus protruding from the cervix more than an inch, but a further investigation revealed vegetative growths in abundance in the uterine cavity. This patient had remained in her room two years, until she started on this trip of less than a hundred miles, and before its completion the hemorrhage became profuse. She had had instilled into her mind the change of life story,and was much surprised to hear that relief could be secured in any other way than by waiting until the change was complete.

In cases where hemorrhage is the symptom complained of, it is well to remember that all cases do not belong in this category. True malignancy, salpingitis, fibromata, and in rare cases perhaps disease of the vaso motor nervous system itself, must be considered as at least a possible cause and should be carefully eliminated, even though the fungosities are easily discovered, because of their possible co-existence.

The removal of one of these causes would have little or no effect upon the other, and the result would, although actually successful as far as it went, so far as complete relief is concerned, be a decided failure.

The prolific cause of these growths is no doubt in a majority of cases, abortions, miscarriages, etc.

That they occur in persons who have never been the subject of either of these conditions no one doubts, though frequently denials are made concerning these conditions that are not based upon the actual condition of affairs. In all cases where menstruation has become profuse and prolonged,I believe it is good practice to insist upon an examination for the purpose of ascertaining the true source of the disease. The hemorrhage is only a symptom and occurs under so many different conditions that its cause should always be diligently sought for. The diagnosis of the patient or that of other physicians, should not be accepted by a careful practitioner.

The diagnosis in these cases is not difficult. A female catheter with an eye near the end, a dull or sharp curette, or even an ear spoon can generally, owing to the relaxed condition of the uterus, be easily introduced into the uterine cavity and one or two of these growths secured.

This object attained, doubt no longer exists and the method to be pursued is plain.

The growths must be destroyed or removed.

Electrolysis has been used and highly recommended for this purpose, and I have no doubt of its efficacy in the hands of competent persons, but with this as with other procedures, the entire surface must be gone over thoroughly or recurrence is certain. For my part I have always been so uniformly successful with the sharp curette that I have never felt the need of other and more cumbersome appliances, none of which, in my estimation, will give as good results.

Curetting a uterine cavity is not a formidable procedure and yet I believe that many regard it too lightly. The introducing of any instrument into the uterine cavity is not devoid of danger under any and all circumstances. If they are strictly aseptic they are not dangerous, but where used without an anæsthetic they are productive of great discomfort in a

large majority of patients, so much so that in nervous or weak persons it is impossible to do thorough work, and where a patient is not under full control the difficulty of performing the operation aseptically is greatly augmented.

Where the vagina and the surrounding parts have been thoroughly and properly asepticised and the operation performed while the patient is under the influence of a general anæsthetic, the cavity can be more completely traversed by the curette, not even a solitary growth need be allowed to remain. The os uteri can be dilated sufficiently to admit of easy access, irrigation resorted to more effectively, and nothing impure need come in contact with either the genital tract, the instrument, or the hands of the operator, and no infection of the tubes or abscesses need follow. Neither will there be the liability to the disagreeable though not dangerous nervous chill which so frequently follows when the operation is performed without anæsthesia.

This phenomenon probably occurs more frequently in the hands of some operators than others. Not long ago a gentleman of large experience who seldom resorts to anæsthesia in these cases, told me that in his cases this operation had been so almost uniformly followed by a chill that he never omitted to warn the patient of its probable occurrence previous to beginning the operation. This has not been my experience though I have witnessed it occasionally.

The benefit derived from this operation in cases where fibroma exist is probably due to the alteration of the nutrition of the parts, as well as to removal of the proliferating cells of the thickened mucous membrane. And in malignant diseases the removal of the dead and decomposing material is always of advantage.

In conclusion I append the following deductions.

1st. Uterine fungosities are of rather frequent occurrence.

2d. Their existence is too frequently overlooked.

3d. When found to exist they should be thoroughly removed while the patient is under the influence of a general anæsthetic.

4th. The sharp curette is as nearly the ideal instrument for this purpose as are the knife and the saw in amputations.

WHAT IS THE SPHERE OF THE NASAL SPRAY?*

T. C. EVANS, M. D., Louisville, Ky.

In a recent discussion on this subject before the American Laryngological Association, Dr. Frank Bosworth, of New York, said: "I have recently removed the air-pump and spray apparatus from my office, and, I believe I have done better work since, than when I placed much dependence upon them." I am not yet ready to adopt such an extreme course as indicated by Dr. Bosworth. I find my spray a convenient method of cleansing the nasal cavities in atrophic rhinitis, in some cases of nasal syphilis and occasionally in the purulent diseases of the accessory sinuses. But, aside from these I do not think sprays accomplish any good; when we take into consideration its indiscriminate use I am convinced that rhinology in general, and our patients in particular, would be much better off if every man doing work in this line would follow the example of Dr. Bosworth. I believe but few men now claim to be able to remove genuine hypertrophies or deviations by local medication, but we all know that it is still a matter of common experience to see patients suffering from purely anatomical obstructions of the nose, who have been astringed, stimulated, disinfected, resolved, oiled and anointed according to the particular fancy of the individual member of the professional gauntlet which he has been so patiently running.

The treatment of diseased nasal mucous membrane by astringent and detergent sprays is such a pleasing, plausible kind of a placebo, has such a wonderfully potent moral effect on the patient, and has associated with it so many hopes and tra-

*Read before the Clinical Society of Louisville, Ky., March 7th, 1893.

ditions that many practitioners still cling to its use, knowing full well that their practice is not borne out either by theory or clinical facts.

For the first year and a-half after I began to devote special attention to diseases of the nasal cavities, I was so situated as to have abundant opportunities for observing the course of these affections under the use of medicated sprays, both in private and dispensary practice. I mention this simply to emphasize the fact that my skepticism in regard to this method of treatment is not born of prejudice, nor is it the product of any pre-conceived theory or notion, but is the legitimate child of disappointment. In spite of all my zeal and faith, after spraying my patients in season and out of season, I was quite forcibly impressed with the fact that all cases of nasal obstruction that came under my observation were almost hopelessly chronic; in fact the only limit set upon the time of treatment was the limit of the patient's perseverance.

Two years ago I read a paper before the Kentucky State Medical Society on "The Indiscriminate Use of the Nasal Spray," in which I endeavored to show the uselessness of this routine method of spraying, as well as to call attention to its pernicious effects, by depriving the patient of the relief that might be afforded by the more rational and radical methods of nasal surgery. In concluding that paper I said, "Taking it all in all, about the most charitable thing that can be said of the nasal spray, is that it rarely does harm, even in the hands of the inexperienced."

Now, after a more extended experience, I wish to reiterate what I then said in regard to the inefficiency of medicated sprays in the treatment of the obstructive diseases of the nose, and to modify that part of my concluding remarks in which I said, "they rarely do harm." All astringents, whether vegetable or mineral, sprayed into the anterior nares act as irritants—the degree of irritation depending upon the strength and temperature of the solution, the condition of the mucous membrane and the idiosyncrasy of the patient, but always acting as irritants in a greater or less degree. The alkaline sprays are perhaps less irritating; still I think it may be safely said that the spraying of any cold, watery solution into the anterior nares is injurious. I mean injurious, of course, in a limited sense, and do not wish to be understood as saying their use is followed by any very grave or marked symptoms, for experience has taught us that the nasal mucous membrane is an exceedingly hardy structure; that it endures the vicissitudes of climate, the vices of civilization as well as the blunders of medical science, if not uncomplainingly at least with a degree of toleration that shows it to be endowed with remarkable powers of resistance.

The use of sprays in cases of acute coryza prolongs and intensifies the attack. In chronic rhinitis they complicate matters by engrafting upon it an acute attack; they always make the patient exceedingly uncomfortable during and for some hours after the treatment. The substitution of vaseline and other petroleum products as a menstruum has done much to mitigate the evils of the aqueous solutions. First, because they are of themselves non-irritating; secondly, because they decrease or nullify the action of the drugs applied to the mucous membrane. But their use is open to serious objections aside from the fact that they are therapeutically inert. They arrest or at least greatly impair the respiratory functions of the nose by forming an impervious coating to its entire mucous surface; they prevent the giving off of heat; they prevent the exhalation of moisture; they prevent the exchange of gases that should normally take place in the nasal cavities—in short, this protecting of the nasal mucous membrane with vaseline, of which we have heard so much, simply means that we abolish the respiratory functions as long or often as we apply protection, so that the inspired air instead of reaching the larynx and lungs saturated with moisture and raised to a temperature approximating that of the blood, is cold and dry, as in buccal respiration. It is admitted even by their most zealous advocates that their prolonged use produces a condition very closely resembling atrophic rhinitis.

The history of nasal therapeutics shows that, sometimes at least, there is much in a name. The older writers laboring under a misapprehension both as to the anatomical structure and the function of the nose, classed all the disorders of this organ under the general name of "Catarrh."

To this name and not to any existing pathological condition, was due the general introduction and great reputation of medicated sprays.

It must be admitted that the spray is a most ingenious apparatus; that it affords a speedy, efficient and cleanly method of applying medicines to the whole of the nasal mucous membranes, but unfortunately for all concerned, we have not in the whole pharmacopœia a single medicine (cocaine perhaps excepted), of which we can say with any degree of assurance, that when so applied it will favorably influence either the course or duration of any of the obstructive diseases of the nasal cavities.

To sum it up briefly, I will say that the sphere of the nasal spray is an exceedingly limited one; that with the medicaments as commonly recommended in text books, its use in most conditions of the nose, is positively detrimental; that there are a few conditions where we find it convenient for cleansing purposes; that it is never curative; that those morbid conditions of the nasal passages which are amenable to treatment, are such as can be corrected or relieved by surgical means.

SOCIETY REPORTS.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

Meetiny of February 2, 1893.

"Dermoids," by Joseph Price, M. D. (See page 561).

ABSTRACT DISCUSSION.

DR. W. REYNOLDS WILSON: In the limited experience that I have had in abdominal work, I find that I agree with Dr. Price in regard to irrigation. I think that it is very important that sterilized water should be used freely. In the Lying-in Charity, I have come to the conclusion that the free use of water, not only in abdominal work, but also in plastic work, is of great advantage. I think, also, that we should exercise great care in keeping the skin clean, so that the needle as it is carried through shall not be contaminated with material from the skin. If the skin is kept clean, if the suture material is kept constantly moistened with the aseptic solution—sterilized water—if the needle is kept free from clotted blood, and if the sponge or pad is frequently used, there will be no results from the introduction of septic material.

In plastic surgery the free use of water is also very important. A small stream of water will keep clots off the surface and keep the wound clean. I think it stands to reason that blood clotting on the surface of the wound, changing from the moist to the dry state, and going through the sticky stage, offers a field upon which any dirty material floating through the air can be deposited.

In the operations that I have done I have kept the surface of the skin perfectly clean. If there has been hemorrhage from an external artery, that should be checked, and if there is any blood on the skin it should be washed off. This is somewhat different from the modern surgical idea of a dry operation. How successful the dry operation is in general surgery I cannot say, but so far as gynecological surgery isconcerned I believe that water is useful.

In regard to the question of sponges or pads, I prefer sponges, because I believe that they can be made aseptic. They hold more water than pads, which can be readily expressed and the surface of the skin kept perfectly clean.

DR. HOWELLS: I have listened with a great deal of interest to Dr. Price's paper on this important subject of dermoid tumors, particularly from the fact that I have been seeing a good deal of his work for the past week or so, and must confess that I am thoroughly pleased with it. It has been my privilege to have been associated with Mr. Tait as pupil and assistant for the past six months, and I am conversant with his later methods, and I have been especially pleased to find that

Dr. Price is following the same lines as Mr. Tait.

In regard to the frequency of dermoids affecting both ovaries, one case comes to my memory in which both ovaries were removed during pregnancy, and each ovary was the seat of a dermoid tumor. Both ovaries were submitted to careful microscopical examination, and in neither could a trace of ovarian tissue be found. This is a curious fact, and points a moral. In the first place, here we had both ovaries apparently destroyed and still ovulation going on and fecundation taking place. It is a question whether this is not an argument in favor of the conservation of ovarian tissue in operation, and whether Polk's views have not good arguments back of them. If he finds a portion of the ovary in good order he leaves it and resects the diseased portion.

I was also interested in the question of irrigation, which is a very important one. I have seen operators remove neoplasms or ovaries, with escape of purulent fluid into the abdominal cavity, who for some reason have neglected to irrigate or wash out the abdominal cavity. In almost all these cases you get post-operative results of a disastrous and dangerous kind. It is often difficult to say where the dividing line lies. In removing a multilocular cyst some of the gelatinous, colloid material may escape into the abdominal cavity, and in some cases there are no bad consequences, while in others there will be secondary inflammation of the peritonæum. Mr. Tait's method in all doubtful cases is to irrigate, and he uses water freely, almost recklessly. He employs his small-sized trocar for irrigation. With this he thoroughly floods the abdominal cavity, moving the instrument among the viscera and removing all débris, Dr. Charles Martin, who has done most of Mr. Tait's operating for the past few months, says that if he had his way he would irrigate in about every case; that it is advisable to irrigate always. He says that he never knew it to do harm, but always good, and in many cases it decides the question of the life or death of the patient. Mr. Tait is not particular about using sterilized water. The water is simply taken from the tap of the house in which he is operating, and is raised to the proper temperature by the addition of boiling water, but is not properly speaking, sterilized.

The point raised with reference to the carrying of infective matter into the abdominal walls and causing suture abscesses is of importance. Mr. Savage always uses his sutures threaded at each end passes the needles from the peritoneal surface outward, so as to avoid introducing septic material from the skin surface.

Dr. E. W. Cushing, of Boston: I have had some experience with dermoids, and my views coincide with what has been said by Dr. Price and Dr. Howells. Especially is this so with reference to irrigation and drainage, which I use in the great majority of the cases on which I operate, and, as Dr. Martin has been quoted as saying, if I had my wishes I should put a drainage tube in nearly every case. In some operations which are perfectly simple it does not seem justifiable to use a drainage tube, but if a drainage tube were put in in every case some gentlemen would be surprised at the amount of bloody serum that would come from a case of the simplest description, as, for instance, the removal of the tubes and ovaries where there are no adhesions and the pedicle is tied off perfectly clean. In such cases I have seen free discharge. In this way we can appreciate the amount of blood and serum that is liable to come from the stitch holes, for under these circumstances it cannot come from anywhere else. I always feel safer when I use a drainage tube, and I have never seen any trouble from it, but I have lost a number of cases from failure to employ it.

In regard to dermoids, there is one point that I should like to emphasize, and that is that of all tumors they are most prone to degenerative and suppurative changes of the most disastrous character. The abundance of adhesions which these tumors have show old inflammation. We often have to operate when these patients are in bad condition. I may illustrate this by an account of a couple of cases seen within the last month. One was that of a lady who had had repeated attacks of peritonitis, with a history of abscesses forming and opening through the bowel. She had reached the last extremity of pain and suffering. I operated, and found a little suppurating dermoid imbedded in a mass of hardened tissue, communicating low down with the bowel. The bowel was so contracted, as I found by autopsy, that it would not admit the little finger. One ureter was entirely

cut off by cicatricial tissue, and the other seriously interfered with and dilated. I would suggest as a point for discussion the question whether or not the mortality is not greater in cases where the ureters are interfered with and the function of the kidneys cannot go on properly. This woman died with symptoms of obstruction of the bowel and sepsis. The patient was lost because the tumor had not been removed years before, when the first inflammatory symptoms occurred. All operating surgeons agree that in these cases death is not due to the necessities of the condition, but to the fact that the patient has not been operated on in time.

Day before yesterday I operated in a case with a similar history of repeated inflammatory attacks. The patient was in a bad condition, with a temperature of 102° or 103°, a pulse of 130 and signs of pus. There was a mass high up in the abdomen, and the pelvis had large masses in it. When I came to operate, I found difficulty in getting into the abdominal cavity. I finally got into a cavity from which a distinct fæcal odor came. This I washed out, and finally a hair escaped. I then knew what I had, and soon pulled out a "chignon" seven inches in length. The question then came up whether to remove the dermoid or leave it. I decided to remove it, which was done with great difficulty, as it was adherent to the intestines all around and to the abdominal wall. There was no pedicle. It had nothing to do with the ovary or uterus. There were the remains of what I took to be the urachus, and a large obliterated vessel. I then washed out and packed the cavity and went into the pelvis, where I found a dermoid of one ovary and a little tumor of the other ovary. I used a Mikulicz gauze drain and a glass drainage tube. These and other cases illustrate the necessity for early attention as soon as the diagnosis is made, and the danger of waiting until repeated attacks of pelvic inflammation have occurred.

Dr. B. F. Baer: I heartily subscribe to all that Dr. Price has said regarding the necessity for early operation and good surgery, and indorse what has been said about the question of time. Sufficient time should be taken to do the work well, whether five or forty-five minutes are required.

I find myself, however, in opposition to my friends concerning irrigation and drainage. As my experience grows I am more convinced that the drainage tube is employed to an unnecessary and excessive degree, and I wish to express myself emphatically in favor of the belief that irrigation and drainage are not necessary in 5 per cent. of cases, taking all classes of cases, from the most complicated to the simplest. I believe that I meet with as bad cases as it is possible to have, for I operate on every case, just as they come along, and I do not drain in 3 per cent. I have not used a drainage tube in operation for dermoid tumor within the last three years, and among the number several had suppurated. During that period I have not lost a case of dermoid tumor. The last one, operated on two weeks ago, contained two quarts of the ordinary material found in these growths, together with a bunch of hair. There were no adhesions in this case, and the contents were healthy. The incision was quite small, less than two inches, and a little of the fluid got into the abdominal cavity; but I did not irrigate. The cavity was clean after a little sponging, and I did not see, therefore, why I should use irrigation and thus consume a good deal of time unnecessarily—an element about the waste of which so much has just been said by the author of the paper—neither could I see why I should employ a drainage tube in that case. The patient has done perfectly well, and the temperature has not been above 99°.

Now, permit me to relate, by way of illustration, a case showing the opposite extreme. Several months ago a lady, who was thought to be suffering from malignant disease, was sent to me from Kansas. She had been ill for a year, was emaciated, anæmic and cachectic-looking. She suffered greatly from pressure upon bladder and rectum. The pelvis was full of an irregular, hard and semi-fluctuating mass, the lower portion of which extended downward, between the vagina and rectum, almost to the vaginal orifice. I thought the disease would prove to be ovarian papilloma. I found it to be a degenerating dermoid, full of decomposed pus. It was adherent to bowel, uterus and bladder, and had burrowed in every direction under the peritonæum and between the vagina and rectum. I literally had to dig the tumor out piecemeal

from between the latter organs. I irrigated in that case almost constantly during the dissection, and I would advise irrigation in such cases. I did not use drainage, however, even in this case; first, because the wall of the bowel was very thin, and there was the fæcal odor to which Dr. Cushing has referred, I therefore feared the occurrence of a rectal fistula from irritation of the tube. In the second place, I did not use drainage, because I had succeeded in removing all of the tumor, and had left the pelvis clean. I therefore regarded the patient as safer without the tube. The only fæcal fistulæ that have occurred in my practice happened during the period that I employed the drainage tube oftenest. It is a weak argument to say that those who have bad results from the tube do not take care of it properly. But, lastly, *a priori* reasoning and my experience had taught me that drainage could be avoided in this and similar cases. The patient recovered slowly, and went home in five weeks. I believe that she recovered better and safer than if I had used a drainage tube. In a case upon which I operated yesterday, a large quantity of old, disorganized blood poured out while I was separating adhesions, and some of it escaped into the pelvis. This lady had been ill for eighteen years with a tumor fixed behind the uterus—a hæmatomatous condition of the ovaries and Fallopian tubes. The adhesions to the bowel were close. After careful dissection I removed the masses. The contents were not fetid. I did not irrigate, and, of course did not drain. The patient is very well to-day, and I have no doubt she will recover without difficulty.

To still further show that drainage is unnecessary and therefore harmful, I will state that I have had one series of 148 consecutive completed ovariotomies (including the hysterectomies during that period), without a death; and of the last 200 operations there has been a mortality of less than 2 per cent. I think that in these 200 cases I have not used the drainage tube three times.

That Dr. Price's cases have recovered does not prove the necessity for the drainage tube, for my cases have recovered without it. My patients do better without drainage, and I am sure they are safer from complications and annoying sequelæ. I do not have high temperatures. The temperature is usually from 99° to 100°. I do not have septic temperatures.

We attain the ideal in surgery when we get primary healing without suppuration, and this can only be obtained by clean operation and closure of the wound.

Dr. Joseph Price: Dr. Wilson has given us an interesting discussion, and I am delighted that his practice hugs mine so closely. He has great faith in irrigation and water in gynecological and maternity work. There I agree with him heartily. In maternity work I believe in soap and water first, last and all the while. I believe it is as important to cleanse the mucous passages as the skin, and practice it most thoroughly; and as fortifying this subject of irrigation I will say that I have washed over 1200 maternity cases without a death from any cause. I have the longest period without a death of any maternity in the world. That is in keeping the patients two week before delivery and a month afterward. The importance of water in obstetrical and plastic work is as great as in abdominal work.

I agree with Dr. Wilson in regard to clots. Dr. Agnew taught that a clot was a foreign body, and that all bleeding should be sought for and checked.

The importance of skin cleansing is paramount in all surgery. If the skin of the abdomen is thoroughly cleansed for two days before section and your materials are clean, suture abscesses are exceptional. Allusion has been made to the importance of the dry treatment. This works as well in abdominal surgery as in plastic surgery. It is here that we have so much confusion in abdominal work. Dr. Baer has alluded to bad cases, and states that he practices the dry treatment with good results, but he has told us repeatedly that he does not operate on pus cases.

Dr. Baer: You are mistaken in regard to that.

Dr. Price: I can prove it from the records of the Society. The dry operation answers very well in the absence of dirt, filth, and pus, of universal adhesions and cheesy disorganization of surrounding structures. Where, for instance, there is destruction of the cæcum or colon above the cæcum, with removal of the perito-

neal coat and perforation, this disorganization extending from the cæcum to the vermiform, often amputating the appendix, which comes away with the specimen, with the ilium cheesy and disorganized, requiring stitches at one or more points, it is impossible to deal with these cases successfully without irrigation.

The question of speed. The paramount importance of rapid and short operations, the minimizing of every detail, that of anæsthesia, of exposure, of manipulation, is universally admitted. Some one has alluded to hurry. By rapid operation I do not mean hurry. Mr. Tait has repeatedly said that a hurried operation is a dangerous operation. You all remember that years ago, before the days of anæsthesia, operations were rapid; the operators were deft, they were dextrous. It was simply startling to see some of the older surgeons, to use a common expression, wipe off a leg. I saw Dr. Nathan R. Smith amputate my brother's leg in a minute and a half. He did it with one rapid sweep of the knife, and said, "Sam, the saw," and away went the bone. I have never seen such speed in surgery. I believe that I am the author of the expression "chronic surgery." Anæsthesia has encouraged the tendency to chronic surgery. Men hang over their operations. As a distinguished surgeon said to his class, "You will meet with difficulties, but you will have to wriggle through somehow or other." What I mean is that if you pick up a tumor with some friable adhesions, a gentle wipe with the sponge will remove them at once. It is not necessary to hang over it and dance about from point to point in doubt. If it is a clean tumor from a clean cavity, the result is clean, and you close the abdomen with three or four sutures without irrigation or drainage. I criticise hurry as much as does any one else. To stop to discuss points in pathology, histology or anatomy, and to demonstrate the various parts revealed, and thus occupy forty-five or fifty minutes, is a mistake, and not fair to the patient.

Allusion has been made to Dr. Polk. While it is fair to give full credit to this surgeon for his work, it must be remembered that Schroeder made a careful effort to save ovaries, cutting away from them small cystomata and saving a small healthy piece of ovary where healthy tubes remained. His results were good. Dr. Polk has championed this work. Dr. Fullerton has referred to two beautiful cases of this character. The women had suffered greatly, and had had the benefit of prolonged treatment before operation.

Dr. Howells has referred to Mr. Tait's use of his trocar in irrigation. This works very well, but it is of metal, and is a good conductor of heat. If the water is warm it will run the temperature of the metal up at once, and you will feel that it is too warm. Again, it has only the side openings. The rectal bougie, with three sets of perforations and a perforation at the end, makes a good flush and sprinkler. It irrigates laterally and at the extremity. It is surprising in using the trocar and funnel with two feet of hose, the quantity of filth, clot and débris of all sorts that can be washed out after these operations for pus, ruptured tubal pregnancy, suppurating dermoids—a tumor that is prone above all others to suppuration and inflammatory action.

In regard to mortality. Dr. Stewart asks for temperature charts and certificates. I shall not take time to speak about temperature charts, because I hold peculiar views in regard to them. The most beautiful demonstration as to the value of drainage tubes and irrigation can be made with a series of twelve or six cases. Take six dermoids with universal adhesions and six angry pus cases with universal adhesions requiring enucleation of the specimens. Flush and drain these cases and place them by the side of six simple ovariotomies with simple healthy adhesions and no discharge into the peritoneal cavity, and note the difference in the pulse and tongues of the two sets of cases for the following two or three days. The six washed cases will have the lowest temperature, the cleanest tongues, coolest skins and the slowest pulse, and will be bright and cheerful and reading magazines.

Dr. Cushing has alluded to the enormous discharge of serum. You will remember in Keith's book he tells how he used drainage tubes in hysterectomy, and the enormous quantity of blood and serum that escaped from these tubes. In one or two cases he incised the vaginal vault and turned out filthy fluid and clot in cases where he did not drain.

Some one has alluded to the necessity of educating the profession in regard to

the importance of promptitude. That is a part of our business here. It is our duty to educate the profession as to the importance of early surgical interference in cystomata, fibroids and the suppurative forms of pelvic disease. The London, Birmingham and Edinburgh surgeons boast that they have educated the profession to recognize the importance of early interference in cystomata. It is that only, with their surgical refinements, that has reduced the mortality to about *nil*. Dr. Bantock lost his fifty-first case in one series.

A word in regard to diagnosis. This is often alluded to and criticised. It is frequently difficult to say what a certain thing is, but we are usually able to say that it is one of two things, and very rarely are we wrong. That is quite sufficient. A few days ago I removed a huge kidney. I was satisfied before operation that it was either the left kidney or a huge cystoma. It pushed the uterus down and filled the abdomen with the exception of a small space high up on the right. From the history and physical characteristics I could not say that it was not a cystoma, although I felt satisfied that it was a kidney. It proved to be a kidney. The history extended back thirty-one years. The kidney had a stone in it and contained two or more gallons of dirty, muddy fluid.

Dr. Baer reported two cases. He says that one had no adhesions. Well, I scarcely know a surgeon doing abdominal surgery, no matter how enthusiastic he is over drainage, that would think of draining such a case. It is not difficult to define our position. I drain about 50 or 60 per cent. of my cases, but I sometimes do six consecutive operations without a drainage tube. In Kansas City I removed a large fibroid tumor, tore out both tubes and ovaries, but I did not drain, notwithstanding I had divested the pelvis of all peritoneum. It was not the safest or wisest thing to do, but the woman made a nice recovery, although she was a chronic inebriate and a Kansas City courtezan. Another case in the same city—one of tubal and ovarian disease, universal adhesions; a difficult enucleation was followed by irrigation and drainage. A speedy recovery.

THE CLINICAL SOCIETY OF LOUISVILLE.

Meeting of March 7th, 1893.

THE PRESIDENT, Dr. I. N. Bloom, in the chair.

WHAT IS THE SPHERE OF THE NASAL SPRAY?

is the title of a paper presented by Dr. T. C. Evans (see page 573).

DISCUSSION.

DR. WM. CHEATHAM: I agree with nearly everything the essayist has said concerning the use of the spray in the treatment of nasal affection. However, I have not been able to dispense with it, especially in home practice, for the reason that I have never found anything to take its place. As a substitute in some cases I use the post-nasal syringe, but find very few patients who can use such an instrument on themselves; again I use the "feeding cup" as a douche for cleansing purposes, after any surgery of the interior of the nose. The objection to the spray in the first place is, that it is not thorough. When used anteriorly it will not reach one-half of the internal surface of the nose. Neither will the douche when used anteriorly. The internal anatomy of the nose is such that no medication used anteriorly reaches thoroughly all parts, so the only thorough way to treat the nose is from behind forwards, whether spray, douche or syringe is used.

In the treatment of laryngitis, for the spray, I have substituted the brush and the syringe; in atrophic rhinitis I scarcely ever use the spray, using the syringe.

DR. COOMES (Visiting): I have listened with a great deal of interest to Dr. Evans' paper and much of what he has said, I think, is correct. But certainly the atomizer is an instrument that cannot be dispensed with, particularly as Dr. Cheatham says, in home practice. No doubt

there are many of these cases that would be better treated by surgical interference, first washing out carefully with either posterior or anterior nasal syringe, as it is now positively known that there are many diseases affecting the nasal cavities that we cannot cure in any other way; still I cannot agree that the atomizer is simply a placebo, but is an instrument for the purpose of carrying medicated fluids into the nose. The question of whether the nasal cavities can be thoroughly medicated by its use, is, of course, a debatable one. In other words, if the atomizer is properly directed high up into the nares all parts of the tissue will be reached. Of course with the atomizer we cannot flood the nasal cavities as can be done with the ordinary syringe. I do not think the atomizer should be attacked *because it is an atomizer.* There are other instruments used as a means of conveying fluids to the nasal cavities for the purpose of medication, that are no more effective as curative agents. I recognize the fact that there are numerous cases which I treated fifteen years ago, that I thought could be cured with the atomizer, that I know now were not and cannot be cured by this means; I know that nothing short of instrumental interference will ever cure them. There are other cases, of atrophic rhinitis for instance, where the parts are dry, and I know of nothing in the world that will so effectually moisten them as the atomizer. It is also valuable in cases of nose-bleed where there is a constant oozing; we often find cases where we cannot pack the nostril as patients will not tolerate it. I think the atomizer has been unduly assailed and that Bosworth — like a good many other men—will move it back into his office. As Dr. Cheatham says very few patients can use a post-nasal syringe; it is a somewhat dangerous instrument, if used by the patient it is very liable to cause strangulation and unless the pharynx is very well trained it is the exception for the post-nasal syringe to be tolerated.

So far as oil and grease are concerned for use in the nose, it is simply absurd. Of course I can understand where a patient has had an exceedingly sensitive nose a little medicated oil may be of benefit.

Dr. J. M. Ray: I am most freely in accord with the statements made by the essayist. Any one who will study the pathology of nose diseases, I think will come to the conclusion that very little benefit is to be derived from any form of medication by the spray or otherwise. I do not think in the paper Dr. Evans intended to attack the spray *per se*, but any form of medication to the nose, whether spray, syringe, douche, or otherwise. I do not think it is possible to cure any form of nose disease by the spray. It is of value as a cleansing agent but not as a curative agent.

The first paper I had the honor of reading before a Medical Society in this city, was on the subject of Chronic Nasal Diseases, and I made the statement at that time, that what we needed was more throat surgery and less throat doctoring. The longer I live the more I have reason to reiterate that statement. I believe that all cases of obstructive rhinitis require for their relief some form of surgical procedure. I do not think that any case of hypertrophic rhinitis could ever be cured by the spray. The disease is not in the mucous membrane; there is no interference with the secretions from the mucous membrane. The cases of so-called excessive secretion from the nose are simply the result of defective drainage; the secretions accumulate because of hypertrophy, and the secretions liberated all at once appear as an enormous quantity, within a short time.

I simply want to emphasize the fact that I do not believe any form of nasal medication applied in solution ever cured any case of chronic nose disease, whether applied by the atomizer, douche or any thing of the kind. We are often forced to wash out the nose, and as a cleansing agent I know of nothing better than the spray used anteriorly and posteriorly.

With reference to the use of oils in cases of acute rhinitis, I believe there neutral are cases in which oils sometimes act as a soothing application and is agreeable to the patient. Whether it cuts short the attack or not, I am unable to say. I heard a doctor friend remark that he had been suffering for a week from an acute attack of rhinitis, and was advised by a number of professional friends to use various forms of medication, every one of which had done harm. He said that he believed there was no form of local application that would cure a case of acute rhinitis. I am much of the same opinion. Take acute

rhinitis and the more you wash it out, especially with any form of aqueous solution, the more irritable becomes the mucous membrane; the more blood we draw to the part the more sensitive becomes the mucous membrane.

DR. S. G. DABNEY: In the main I agree with what Dr. Evans has said. The spray in my judgment is not of much value as a curative agent, except perhaps, in acute cases where it seems to have a pleasant, soothing effect. I hardly see how we can entirely dispense with the atomizer, not only in atrophic rhinitis but also in the hypertrophic form. Most modern pathologists now claim that hypertrophic rhinitis is due to some form of obstructive process and with each inspiration there is more or less vacuum created just back of the obstruction, the air not passing readily from before backward, being hindered by this obstruction, the partial vacuum so created causing distension of the blood vessels and consequent hypertrophy. Granting that this pathology be true, the treatment indicated would be a removal of the cause, and that means to remove the obstruction. I have very little to say upon the subject as I believe the ground has been very fully covered. The spray has been greatly abused in the past, because relied on as a curative agent; but I do not believe that we will dispense with it entirely in the future, as for cleansing purposes and especially for use at home it is valuable.

DR. T. P. SATTERWHITE: I have used the atomizer for some years but have never seen a nasal cavity thoroughly cleansed by any form of spray. I do not suppose the quantity of liquid thrown in the form of spray into the nose, at any time would amount to over a dram or two. Where there is obstruction of the secretions I have always used the douche, but not to have any current to go through the nose with much force. This is the only form with which I have been able to thoroughly cleanse the nasal cavity.

DR. T. C. EVANS: I really feel very much flattered that the gentlemen present have discussed the paper as thoroughly as has been done, and feel gratified that most of them agree with me. Perhaps Dr. Coomes did not properly understand me: I quoted from an article by Dr. Bosworth, but stated that I had not gone to the extreme of having the atomizer removed from my office. I have found the spray very useful for cleansing purposes, but in cases of chronic obstruction of the nose I cannot see that it has done any good, and also I have very serious doubts about acute attacks being cut short. I am sure that they were not shortened any by use of aqueous solutions. I have seen a few cases that seemed to be made more comfortable and slightly benefited by cocaine early in the attack. I mentioned particularly in my paper that the most frequent form of medication to the nose was by application of the spray. What is true of the spray will also apply to other forms of nasal medication. I meant to say that all forms of local medication in the obstructive diseases of the nose is worse than useless.

STRICTURE OF THE TEAR DUCT.

DR. WM. CHEATHAM: I have recently had three cases of stricture of the tear duct which I want to mention: The first case, a young woman, has an obstruction of the tear duct with an abscess of the sac. I want especially to note that in two of the cases after inserting the probe I made an examination of the nose, which I have not done very much until recently, and found that the probe instead of entering the inferior meatus had penetrated along between the mucous membrane and the turbinated bone into the middle meatus; almost no force or violence was used in making this false passage.

Another case, child five years of age. I had treated this patient for stricture of the tear duct for four or five months; she had also been treated by several other physicians without relief. I had examined the nose several times and saw no special obstruction there. The tear duct seemed to be perfectly formed and there was evidently no stricture, still drainage could not be induced. Upon closer examination I discovered that the turbinated bone was pressed too close to the wing of the nose. Taking a strong pair of forceps and inserting them between the side of the nose and the turbinated bone with very little effort I lifted it into proper position and the child has had no further trouble. The whole difficulty was that the turbinated had grown too close to the side of the nose closing the passage. In correcting the position of the bone, I

relieved the child after it had been treated at least eight or nine months.

I want to make a point that it is very important to examine the nose in these cases, especially after you have used the probe, to see whether it has made a false passage as it did in the two cases mentioned, and to see if there is any obstruction in the nose at the lower end of the duct.

DISCUSSION.

DR. J. M. RAY: It has been my experience that treatment of obstructions of the lachrymal apparatus is as a rule very unsatisfactory. I have tried nearly all forms of treatment that have been devised and the more I treat this trouble the more charry I become about slitting up the puncta and canaliculus. I believe if you slit up the puncta and canaliculus you destroy capillary attraction and do away with the muscular contraction in the circular muscular fibres in the walls of the canalicula and then all drainage that takes place from the eye must be simply gross drainage. I always make a point to examine the nose in these cases; sometimes I have been able to discover the probe in the nose, in others have been unable to find it. I am treating a case now of chronic obstruction in the lachrymo-nasal duct. I can pass a probe through the duct into what I presume is the nose, and the nose will bleed, then looking into the nose I am unable to find the probe. I put cocaine into the nose contracting the turbinated and passed the probe to see if I could feel it—I was able to get the metallic click but could not see it.

I believe if you once start in with these cases, the best thing to do is to open up the duct well into the sac and thus get gross drainage; further, that the best way to do this is to take the lachrymal knife and slit well into the sac, pass it into the nose and cut the stricture, then turn the knife and bring it out to be sure that the stricture is cut; then by continued passage of the probe afterward see that it is kept open. There is no doubt that a great many of these cases are accompanied by nose disease, hypertrophy or thickening of the turbinated; therefore I am in the habit of examining the nose to see if the turbinated is not misplaced in any way. I believe that the few cases that I have seen completely cured have been cured in the manner above described.

DR. COOMES: I never tell a patient that comes to me with obstruction of the nasal duct that relief can be assured in any given time; it may be in six months, six years, or they may get relief in one month. I think in the majority of these cases the trouble will be found to be stricture, and it is absolutely necessary to secure thorough drainage. Occasionally I have found stricture in two or three places. Like Dr. Ray I have run across obstinate cases where I have failed to get relief notwithstanding the fact that I have slit up the canaliculus, upper and lower, making a free opening. I think this is the best method of treatment, as in that way we get free drainage.

DR. WM. CHEATHAM: My idea in reporting the two cases was to show how easily a false passage might be made, the probe just slipping along between the mucous membrane and inside the turbinated bone, no more force being used than when the probe passes through the natural opening. I believe the latest authorities agree that the tears are not carried by capillary attraction at all. If stricture exists in the nasal duct I think it should be located just as would be done in the urethra. Suppose you have a stricture in the upper part of the tear duct, what is the use of running a knife through into the nose? With a stricture in the upper part of the tear duct I fail to see the occasion for using the knife. It seems to me the proper thing to do would be to use the probe and dilate it thoroughly.

CASE OF SYPHILIS AND TYPHOID FEVER.

DR. J. M. KRIM: Six weeks ago I was called to see a case that has been under treatment for secondary syphilis, having all the symptoms usually present in such cases. I found the patient suffering from an attack of typhoid fever, and four weeks after he came under my observation the eruption existing prior to the development of typhoid fever entirely disappeared. The enlarged glands grew smaller, and he has now in the sixth week, not a symptom of secondary condition existing. He was not under treatment more than ten days for secondary syphilis, and certainly the treatment he received in this time could not have been sufficient to cause disappearance of the syphilitic symptoms. I simply want to

ask the members if they have ever seen a case where the eruption disappeared in this way, and whether it will return again.

DISCUSSION.

DR. I. N. BLOOM: It is not unusual for eruptions to disappear during an acute disease, and as a rule recur after the acute disease has passed off. In this case, however, the eruption had already lasted three weeks, which is as long a time as it usually remains. The most interesting feature is the disappearance of the enlarged glands. I never give medicines in cases of syphilis until the secondary symptoms are manifest. I have known syphilides to disappear in three or four days before medicines given could possibly have had any effect. Then again I have seen papular and pustular syphilides last two, four and five weeks and longer under rigid treatment.

LATERAL DISLOCATION OF ELBOW; CHILD AGED NINE YEARS.

DR. A. M. VANCE: I would like to mention a case of dislocation of the elbow-joint in a girl nine years of age, the second case of lateral dislocation of the elbow I have ever seen where the ulna and radius were carried entirely outside of the humerus, reduction being very difficult. In the first case, which was a patient about the same age, treatment was instituted for fracture and reduction was never brought about. In the last case referred to, I believe the difficulty was from the biceps tendon, it in some way preventing the bones remaining in position after they were replaced by great force. I finally, however, reduced it and the subsequent history is that the whole arm is greatly swollen and the child has suffered a great deal from the traumatism due, undoubtedly, to the efforts at reduction. It is the second case I have ever seen, and I believe that dislocation laterally of the elbow is very rare. There was no fracture in this case.

EPILEPTIC SEIZURES DURING TONSILLOTOMY.

DR. T. C. EVANS: About two weeks ago I operated on a patient, removing a very small piece of tonsil. I applied with a cotton carrier a small quantity of four per cent. solution of cocaine, and proceeded to pull the tonsil up with forceps and clip off the piece with a pair of scissors. The patient did not seem to suffer any pain and there were no symptoms of syncope. Without any evidence of being sick—no whiteness around the mouth—the patient simply dropped out of the chair, and would have fallen on the floor had I not caught him. I laid him on the floor thinking that it was simply a case of fainting. But he had a very distinct convulsion and I proceeded as quickly as possible to get some whiskey; by the time I had gotten the whiskey to him he had regained consciousness.

The point that struck me was that it might be a case of cocaine poisoning. As he recovered so quickly I concluded that this could hardly be the case and inquired into his previous history. I asked him first if he ever had a fainting spell before, and he told me that he had and seemed rather disgusted with himself that he should have gotten sick in my office. I inquired into the history a little further and learned that on one occasion he had been sitting in a chair reading and had one of these attacks, simply falling out of his chair on the floor, so I concluded I had just happened to operate at the time he had one of these epileptic seizures.

DISCUSSION.

DR. WM. CHEATHAM: I think Dr. Evans' conclusion of epileptic seizure is probably the correct one.

DR. A. M. VANCE: My experience is that people often topple out of the operating chair without any cocaine, without anything except a minor surgical procedure. I had a patient faint to-day while the instruments were being prepared for a minor operation. I can recall several cases where fainting has followed the introduction of the hypodermic syringe, there being no history of epilepsy or anything of that kind. However, in Dr. Evans' case the history points very strongly to the fact that it was epilepsy.

DR. COOMES: I have seen several cases of cocaine poisoning, and my observation is that it sometimes takes a very little cocaine to produce a decided impression.

DR. A. M. VANCE: I believe that a great many of the men who have written upon the subject agree that cocaine, when used about the head, has a much more

powerful effect than anywhere else. My experience is that this product is absorbed more rapidly by the mucous membranes than it will be when applied to cut surfaces. When a tourniquet can be used I believe that cocaine can be employed *ad libitum*, but in other cases it is sometimes attended with considerable danger. I remember using in one case, where operation was done for an epulis on the upper jaw, twenty-nine grains of cocaine in solution—the operation lasting nearly four hours. I believe the reason this patient did not die of cocaine poisoning was that the blood was continually washing it away. This is the greatest amount of cocaine I have ever used in one case. For a number of years I employed a four per cent. solution, but now use a six per cent. In the case referred to where such an enormous quantity was used, the patient absolutely refused to take chloroform, owing to her having been operated upon some years previously in Virginia and nearly dying from the effect of the anæsthetic. She recovered from the operation and now wears artificial teeth, the excrescence never having returned.

I have had no trouble in the use of cocaine since the first few months' experience, invariably giving whiskey beforehand.

CORRESPONDENCE.

PHILADELPHIA—THE MEDICAL AND SURGICAL CENTRE OF AMERICA.

To Editor of Med. and Surg. Reporter:

Sir:—Philadelphia is no less famous for great physicians and surgeons than for men of preeminence in other lines.

New York has been thought by many to equal, and even to excel Philadelphia, and of late, Chicago aspires to share the prominence of these cities as medical centres.

We believe, yes, realize that general surgery here is not one iota inferior to New York or continental surgery. How could Philadelphia lag behind with its incomparable list of illustrious teachers and workers of the past linked to the present by such names as Agnew, Gross, Levis or Meigs? Morton, Deaver, Keen, Roberts, Ashurst, White, and many others in all respects their peers,—these men, inspired by professional zeal and ambition, with natural talent developed by special training and hard labor, maintain general surgery in that high state of excellency not to be surpassed on either continent.

No higher compliment can be paid the graduate in medicine than having merited and obtained a diploma from one of the medical schools of this city. And to-day, in the schools of this city, more than two thousand students are matriculated in medicine alone,—drawn from Canada to South America, and from the Atlantic Ocean to the Pacific.

Philadelphia was among the first to demand a higher standard of medical education, and to establish it by requiring a three, and now a four year's course of study, with terms of seven to nine months each year, and a demonstration of proficiency before graduation.

For *post graduate* work it can be truly said that Philadelphia excels, and, all the year around, physicians are here preparing themselves for greater achievements in general practice and surgery, or in some specialty.

For Post Graduates the Polyclinic was organized and endowed several years ago, and to-day, is an honor and an ornament to the American people. The teachers are men of ability, great experience, wisdom and are the ablest of clinicians.

The physicians of Philadelphia have no "dude airs" or "red tape regalia" to present, to weary your patience or consume your valuable time, nor, do they consume your time by telling of their European trips, or what Sir James Paget, Landolt, Von Bergman, Martin, Sir Lenox Brown, Keith, Bantock, or Tait said about them, or of ovations received. But they prove conclusively that on their foreign trips their time was not occupied

in paying respects to sour krout, limberger and lager beer.

Their manner of teaching is simple and easy, yet grand and beautiful, and you are at once convinced of the profundity of their knowledge, high scientific attainments, remarkable courtesy and gentlemanly bearing. One is always delighted to return here, and when you have remained your allotted time, either in Post Graduate work at Polyclinic or with some specialist, you are loath to leave, and separation from such illustrious lights is indeed painful, whether you are a student in general medicine or surgery, ophthalmology, rhinology, otology, laryngology, genito-urinary, rectal, abdominal and pelvic surgery, or gynecology, dermatology, or obstetrics. You are allowed to examine, make diagnosis, prescribe and treat patients in each respective branch or specialty, and to make the refinements in diagnosis, treatment and technique of operations and minutiæ of handling instruments a part of self. And when each one returns home to his former field or seeks a new location, he goes forth a practical and competent specialist, able to reflect honor and credit to this great medical and surgical centre.

Nothing has been said about laboratory work at the Polyclinic, from the fact that the students at the Polyclinic have been general practitioners five, ten or fifteen years, and are good first class men who have succeeded in general work, been hard students and close observers, and have had, as a rule, previous training in histology, pathology, bacteriology and microscopy. Yet those who desire such instruction can obtain in Philadelphia as good as can be had on the continent. The Polyclinic has already reached a high state of perfection, yet there will be certain additions made that will very materially enhance the work and teachings, and be of inestimable benefit to both faculty and matriculants.

The writer has been more interested in ophthalmology at the Polyclinic than any other branch of medicine. He is proud of the course, and deems it one of earth's greatest blessings to have been a student of so distinguished and able tutors as Professors S. D. Risley, Edward Jackson and George E. de Schweinitz.

This letter would be incomplete if reference was not made to the two illustrious abdominal and pelvic surgeons of Philadelphia, viz: Drs. Joseph and Mordacai Price, who have a private hospital at 241 N. 18th Street with capacity for ninety patients. This institution has averaged forty to forty-five private operations for each of the months that I know of. Here the writer has seen the most difficult, painstaking and heroic abdominal and pelvic operations done in surgery. The courage, dexterity, rare judgment, precision, skill and almost mathematical certainty of recovery of patients is simply marvelous. These surgeons do what nature cannot do, they remove the offending growths or lesions under aseptic precautions, quick surgery, short anæsthesia, perfect hemostasis, minimum of shock, practical nursing reduced to a science, and perfect rest. Nurses are so well trained that they know the various steps of different operations, can hand the needed instrument at the right time to the operator without a word from him, the expressions of his face indicating the steps anticipated by the nurse. Besides the nurses can handle anæsthetics, hemostats and drainage tubes with such a skillful degree of accuracy, that some who claim to be abdominal surgeons might draw lessons from them. Dr. Price does not irrigate and use drainage in many cases because it is not necessary. But there are cases where irrigation and drainage are demanded and highly essential. These surgeons have the bulk of their work in cases demanding heroic surgery as a conservative, *dernier*, radical and thorough life-saving measure. Many patients have been previously dallied and tinkered with by the minor gynecologists, through office *rapid dilatation* and *curetting*. From the number of physicians of the North, South and West, as well as from the city, who daily attend Dr. Price's operations, one is convinced that the Prices are in themselves a whole faculty in abdominal and pelvic surgery.

It is with much pleasure that the writer refers to some brilliant surgical operations done at the Medico-Chirurgical Hospital by Dr. Ashton, whose courtesy, hospitality and exceeding kindness have made a grateful and lasting impression. He is a rapid operator and in him chronic surgery is not known or recognized by the spectator.

Another great advantage in taking post-

graduate courses here, is the various medical, surgical and pathological societies to which you are invited several nights in each week. Here you see, meet and listen to other professional giants not members of the faculties of the different schools.

Any physician contemplating a general or special course should keep his eye on Philadelphia and the Polyclinic. Physicians and surgeons here treat strangers and visiting physicians and students of the Polyclinic with the most marked courtesy and consideration, invite them to see their operations and clinics, and make life as pleasant as a sojourner could wish. Physicians should consider it quite a favor and a compliment to get to visit and witness the operations in abdominal and pelvic surgery, and demonstrations of pathological specimens after operation, at Dr. Price's private hospital. Dr. Price always demonstrates the pathological specimens, showing the need and necessity of a surgical operation. Having been associated with Dr. Price three months, one month in 1889 and two months this last winter, seeing his work daily, I am prepared to state that he operates for pathological lesions and finds them. His surgery is conservative for nothing else would save the patient. His conservatism is doing the right thing at the right time, the best that could be done for each patient.

Two operations at the Polyclinic for larcerated perineum, and two for the same at the Gynæcean Hospital, were decided successes.

Dr. J. M. Baldy proved his skill in two intra-vaginal hysterectomies in which cancer had begun to develop in the body of the uterus but could not be detected, demonstrating the surgical meaning of a uterine leucorrhœa or metro-staxis after the menopause, as pathognomonic of cancer, and early surgical interference and removal of the offending organ before constitutional infection.

One of the boldest and most rapid abdominal operators is Dr. Baer. He showed the writer many courtesies, is an instructive lecturer, a good diagnostician, claims to not use the drainage tube more than two or three times in two hundred cases of cœliotomy, resorts to the dry treatment of the peritoneal cavity. He removed a fibroid of tube and ovary, with numerous strong adhesions, without drainage or irrigation, with an after temperature 100° and pulse 96, and, anticipating hemorrhage several hours later, reopened abdomen. He teaches gynecology and physical diagnosis of pelvic organs with force and precision. Dr. Baer demonstrated his operation of tying or shortening the broad and round ligaments for prolapsed uteri through abdominal section. He operated on a woman with prolapsus uteri, tied off the broad ligaments, thereby shortening them, also the round ligaments; replaced the womb in its normal position, and ten days later did operations for cystocele and rectocele, getting primary union and giving a new appearance to the genitalia,—that of a virgin ostium. Dr. Baer also demonstrated several times his method of intra-peritoneal hysterectomy and tying of the uterine arteries, dispensing with the *serre noud*, and coaptating the peritoneal layers (anterior and posterior) over the cervical stump, hermetically closing it, cutting off connection between the peritoneal cavity and vagina.

It is self-evident that students and post-graduates have advantages in Philadelphia not to be had in other large cities.

While Polyclinic schools and hospitals are of great benefit to the profession and to humanity, there should be restrictions around every one, viz: The matriculant should be endorsed by his county, district or state society, and should present his credentials before matriculating, take an oath that he is not going into quackery after completing his course, and register in the general or special branch he desires to devote his time and attention to. No man, physician even, with many years general practice can be a specialist in three or six weeks without long previous study, training and experience in some special line. Yet there are physicians who have seen one or two operations in abdominal surgery by some skilled surgeon, an adenoid vegetation removed from vault, or enucleation or cataract extraction, and returning home, have announced in the weekly or daily newspapers their cards—"Specialists in Gynecology, diseases of nose and throat and eye." The great evil likely to attend Polyclinic teaching is the manufacture of charletans. Therefore let every post-graduate Medical and Surgical College have restrictions to suppress and prevent quackery, and not aid in their development.

J. G. Carpenter, M. D.

Stanford, Ky.

THE MEDICAL AND SURGICAL REPORTER

ISSUED EVERY SATURDAY

ADDRESS
Care P. O. Box 843, Philadelphia.

HAROLD H. KYNETT, A. M., M. D., Editor.

RODERIC C. PENFIELD, Publisher.

316-18-20 North Broad Street, PHILADELPHIA.

TERMS:—Five Dollars a year, strictly in advance, unless otherwise specifically agreed upon. Sent three months on trial for $1.00.

REMITTANCES should be made payable only to the Publisher, and when in sums of Five Dollars or less, should be made by Postal Note, Money Order or Registered Letter.

NOTICE TO CONTRIBUTORS:—We are always glad to receive articles of value to the profession, and when used they will be paid for, or reprints supplied, as the author may elect. Where reprints are desired, writers are requested to make a note of that fact on the first page of the MS. It is well for contributors to enclose stamps for postage, that the articles may be returned if not found available.

SATURDAY, APRIL 15TH, 1893.

EDITORIAL.

SUPPORT THE MEDICAL EXAMINERS' BILL.

Every physician who appreciates the danger to the community of allowing ignorant persons to practice medicine, should give earnest support to the Medical Bill now before the Senate of Pennsylvania. Efficient assistance will be given the Legislative Committee of the State Medical Society, if every reader of THE REPORTER will at once write to the Senator representing his district, asking his vote for the bill. The bill originally introduced in the Legislature has been modified so that it more nearly resembles the New York law than it did at first.

The well-known surgeon of Brooklyn, Dr. L. S. Pilcher, stated in his recent presidential address at Albany, that the New York law was exceedingly satisfactory; and Dr. D. B. St. John Roosa, President of the New York Academy of Medicine, gives similar testimony as to the efficiency of this law in elevating professional standards of education and protecting the people from ignorant and dangerous practitioners.

The present Pennsylvania bill, as stated in THE REPORTER last week, provides for a Medical Council which shall supervise the three Medical Examining Boards, and see that the three boards keep to the same standard of proficiency in their examinations.

The determination of how much the applicant for license to practice knows of general educational topics, before being allowed to appear before the examining board, and the question of the validity of his medical diploma, and of his moral fitness for the profession rests with the Medical Council. In fact the bill creates what is practically a single licensing board with three examining committees under its jurisdiction. This is a little more cumbersome than the original method, but will, it is believed, be equally good. The Legislative Committee modified the original bill of the State Society after holding a conference with the officers of the State Society and representative members of the profession connected with the

great medical schools of the state.

Pennsylvania has so long been without a proper medical law that THE REPORTER earnestly urges all to give aid in securing the passage of the present Boyer bill. Many may feel that they would like to criticise individual features of the proposed act; but it must be remembered that our first duty is to protect the public from dangerous charletans and ignorant doctors. The low grade schools graduate many such, and now Pennsylvania is one of the states in which they can with ease settle to practice. No one should oppose the proposed law except those who believe in supporting two years' medical colleges and low grade three years' schools.

Cleared Up.

It was plain from the start that the reporters would have to be called in to clear up the mystery attending Col. Shepard's death. Two physicians of the highest standing had told what they, on the spot, had made out to be the causes of death, but their official bulletin was miserably deficient in those details which the public is entitled to have in all such cases. It was only what we expected, therefore, when we found Sunday's papers, almost without exception, trying to gratify that "element in human nature," as the Boston *Herald* calls it, which insists on a daily mess of scandal and brutality. One paper, properly resenting Dr. McBurney's unwillingness to give it a spicy column, made up a "statement" of its own and put it into his mouth. Another charged him with "criminal negligence," on the strength of private information derived from a "friend of the family," and we understand that the said friend will soon be called upon to foot the bill for damages which a suit for libel will undoubtedly entail upon the paper that fondly relied upon his word. Still another reporter had a theory that Dr. McBurney was "unnerved" by a "run of bad luck" he had been having with his cases lately, and so could not be expected to act, in an emergency, with the intelligence and promptness which this reporter always has at command in his critical operations. It is highly fortunate that the physicians thus barked at are of such established character and skill. Inexperienced men in their situation would be hounded to professional ruin by the improvised doctors who would start up in every well-regulated newspaper office to show them how they had criminally blundered. As it is, we imagine that the hounding will be done by the other side.—*Nation.*

Dr. W. H. Link has observed in his capacity of Pension and Life Insurance Examiner, that hernia is the exception in *fat men.* In a communication to him, Dr. Thos. Manly of New York, confirms the observation and adds that he finds hernia in the female most frequent in fat women.

Brittle Bones.

Mrs. Peter Kelly, of Barboursville, W. Va., the woman whose bones have for some time broken like brittle glass when she moved her muscles, has died suddenly and without apparent pain. Her bones did not pain her when they broke and they knit together readily, but continued to break in new places at every muscular exertion she made.

Mrs. Kelly was in delicate health when the disease first made its appearance. She was just recovering from a long and serious illness. One evening she started downstairs to get a drink of water. When halfway down the bones of her right leg gave way with a peculiar glass-like snap without apparent cause. She called her husband, who carried her back to his bedroom. On the way the bones of her left arm broke in several places with the same peculiar snapping sound she had heard and felt when the first fracture occurred. As she was deposited on the bed the bones of her left leg broke in the same unexplainable manner, and various other bones have broken since.

The reason given by surgeons for the breaking is the deficiency of animal and a superabundance of mineral matter in the bones. The rarity and strangeness of the disease has caused it to be carefully watched by the medical and surgical fraternity. Now that Mrs. Kelly is dead the profession is desirous of holding an autopsy, but the relatives will not have it and will guard the grave.—*Roch. Herald.*

BACTERIOLOGICAL NOTES.

The Bacteria of the Stomach.

Gillespie (*The Journal of Pathology and Bacteriology* I, No. 3, 1893, p. 279) gives the results of his observations on the micro-organisms which he found in specimens of the gastric contents of patients in the Royal Infirmary of Edinburgh, suffering from various ailments. Twenty-four micro-organisms were obtained from different individuals. They were cultivated on various media to ascertain their products, especially with regard to their acid-producing power, and to estimate the effect of hydrochloric acid added to them in a similar manner to that in which it is added in life and, as far as possible, under the same conditions. The organisms obtained were largely those of well known species. The discussion of the different forms is very exhaustive with reference to the points enumerated above, but the more important conclusions deduced from the facts observed, their bearing on the etiology of dyspepsia and the treatment of that group of diseases, is all our present space will permit.

There are: "(1), Many organisms can grow in the human stomach. (2), Many of them can be grown from the contents of the stomach even when they are very acid. (3), From many cases in which organic acids are present in the stomach contents, micro-organisms can be grown which produce the same acid on suitable media. (4), Most of the organisms so grown are very resistant to the action of acids. (5), Hydrochloric acid combined with proteids—proteid-hydrochlorides—has little inhibitory power on organisms, in comparison with free hydrochloric acid. (6), More micro-organisms can be grown from the gastric contents if plates are used and a medium that will not liquefy at the body temperature, than if plates of gelatine be used. Agar-agar is a good vehicle. Yeasts and mucous, however, are best grown in bouillon, being isolated afterwards on gelatine plates. (7), Micro-organisms, if present in quantity, exercise a deleterious effect on both gastric and pancreatic digestion. (8), Pathogenic organisms, which are usually very markedly affected by hydrochloric acid, may pass through the stomach unharmed if the meal with which they are ingested be large and chiefly proteid in character. Provided also, it may be from some fortuitous circumstances, that the supply of hydrochloric acid be somewhat deficient. Under these circumstances most, if not all, the secreted acid combines with the contained proteids. (9), Many non-pathogenic germs do, as a matter of course, pass through the stomach unharmed or only temporarily inhibited. This accords with Macfadyen's observation that the bacteria of the small intestine are constantly changing in numbers and varieties. (10), A small quantity of the free acid, if combined acid be also present, is sufficient to kill or inhibit organisms which could resist a similar quantity of the free acid alone. (11), Although bacteria are of no aid to peptic digestion, and are a hinderance to the pancreatic ferment if in quantity in the duodenum, they still are of great use in the small intestine where they control putrefaction. The organisms which most easily pass the stomach are those which give rise by their growth to the fatty acids, as they are most resistant to the action of the acids. Their products in the small intestine are sufficient to keep the contents of that viscus acid, and they thereby prevent or control putrefaction. In the large intestine the secretion is so alkaline that the putrefactive organisms reassert themselves. (12), Increased putrefaction in the intestinal canal may therefore be due, in some cases, either to insufficient mortality among the putrefactive organisms in the stomach, or to too great mortality among the acid-forming bacteria and yeasts. (13), The lactic acid which appears during the first stages of digestion is due to the action of organisms. (14), The lactic, acetic, butyric, and succinic acids found in gastroectasis are due also to organisms which luxuriate in the too stationary contents.

The Parasitic Origin of Cancer.

The present theory of the nature and cause of cancer is becoming more and more questioned by the results obtained by careful pathologists, who are now advocating the theory of a parasitic protozoa as the specific cause of this form of ma-

lignant tumors. This theory is supported by Sawtscheuko of Germany, Foá of Italy, Sandakewitch of Russia, and Galloway of England, all of whom have demonstrated the presence of the parasite within the carcinomatous cells.

Ruffer (*Britist Med. Jour.*, Nov. 5, 1892) has described the intra-nuclear stage of the parasite. The protozoa first appear in the nucleus of the cancer as small, hard, deeply stained spherical bodies, hardly distinguishable from the nucleolus of the cell. They rarely occur single, but appear in groups of from two to twenty. When filled with these spores the nucleus has a dark appearance and its edges are irregular. When developed more fully, the organism becomes more transparent, and finally a minute nuclear body appears in the center of each parasite and the surrounding capsule becomes distinct. Occasionally one of the parasites increases in size at the apparent expense of the others. They gradually make their way from the nucleus of the cell into the protoplasm. They were most numerous in soft, rapidly growing cancers.

Tubercle Bacilli in the Lymphatic Glands of Non-tuberculous Persons.

Pizzini (*Zeitschrift f. klin. Med.* xxi. p. 329) gives some very interesting results from the inoculations of guinea pigs with portions of the lymphatic (bronchial mesenteric and cervical) glands from forty subjects, in which death had occurred from accident or acute disease other than tuberculosis. The animals were inoculated, under strict antiseptic precautions, either subcutaneously or in the abdominal cavity. The results obtained in thirty cases only were considered reliable. Of these forty-two per cent. were found to contain tubercle bacilli. These experiments are intended to show that under certain circumstances the tubercle bacilli after passing through the epithelum of the air passages are destroyed by the phagocytes; under other circumstances the bacilli give rise to primary tuberculosis of the lymphatics which later may become generalized, and that in some cases the bacilli remain dormant in the lymphatics, especially the bronchial gland, but retaining their virulence. The prevalence of the infection of the bronchial glands being due to the fact that tuberculous infection occurs most frequently in the air-passages, and upon their anatomical situation and physiological relation to the organ of respiration. Tubercle bacilli were not found in the mesenteric glands. In two cases they were demonstrated in the Pacchionian bodies. Too much stress is usually laid upon the mode of infection and not enough upon the resisting power of the tissues. Great importance is attached to the condition of the blood, for if this becomes deteriorated the development of the bacilli present in the glands, is enhanced.

ABSTRACTS.

PETTENKOFER'S PERSONAL EXPERIMENTS WITH THE CHOLERA GERM.*

Since the discovery of the cholera bacillus, which is a constant attendant in the fæces of all cholera patients, it is generally accepted that cholera is due to this organism alone. Pettenkofer, however, has maintained his local predisposition theory, even with regard to this disease. The etiology of cholera is regarded by him as an equation of three unknown quantities, x, y, z; x represents the cholera bacillus; y, something dependent upon locality and time (local predisposition); and z, individual predisposition. Thus, it is quite as necessary to have a predisposed locality as a predisposed individual.

Regarding the human being as the only suitable medium upon whom indisputable and incontestable experiments concerning the causation of cholera can be performed, Pettenkofer experimented upon himself. After neutralizing his gastric juice, he drank, on October 7th, a pure boullion culture of cholera bacilli which had been prepared for him from cultures sent

*Maryland Medical Journal.

from Hamburg. During the time following this he continued to partake of his usual food. His daily observations were as follows:

October 8th, one stool, normal.

October 9th, two mushy stools; two watery stools, gurgling in the intestines.

October 10th, four very watery stools, colorless, continuous gurgling.

October 11th, two very watery stools, gurgling.

October 12th, five very watery stools; temperature 36.7° C.; pulse 86.

October 13th, four, mostly watery, colored stools.

October 14th, one normal stool.

October 15th, two quite normal stools.

From this time on Pettenkofer could not perceive anything abnormal.

On October 17th, Professor Emmerich, after neutralizing his gastric juice, partook of a similar bouillon culture of comma bacilli. His observations were:

October 17th, one normal stool, two mushy and one very watery stool.

October 18th to 19th, three rice-water stools, each of 500 cc.; great thirst.

From October 19th, 6 A. M., to October 20th, evening, fifteen to twenty colorless, watery stools, each of 100 to 200 cc. In the evening of the 19th, 15 drops of tr. of opium were injected into the rectum, and following this, powders of opium and tannin were given.

From the night of October 19th to 20th he had eight, and from the 20th to 21st of October, twelve colorless, watery stools of from 100 to 200 cc.

On October 21st, the first mushy stool was noticed.

From now on the stools were more consistent, and on October 24th, the stools were consistent and well formed.

In the diarrhœic stools of both Pettenkofer and Emmerich cholera bacilli were found in abundant quantities.

From these two experiments made upon the human being, Pettenkofer draws the conclusion that the comma bacillus does not produce a specific poison in the intestine, which is the cause of cholera.

Although we must look enthusiastically upon these wonderful experiments in which Pettenkofer and his colleague offered their lives in the interest of science, we must agree with Frænkel that they prove quite the reverse of what was intended. Pettenkofer points ironically to the fact that Koch and his followers claim that he and Emmerich had really passed through an attack of cholera.

If we examine the cholera cases described by Guttman, in which the only marked symptoms were the diarrhœic stools, we must agree with Frænkel that both Pettenkofer and Emmerich suffered from slight forms of the cholera. From experiments made by Frænkel, it has been shown that cultures of cholera bacilli lose part of their virulence after a time. This, together with the fact that all persons are not equally susceptible to severe attacks of cholera, may explain why Pettenkofer and Emmerich did not suffer from a severe form of the disease.

Since Pettenkofer believes he has proved that the comma bacillus cannot be looked upon as the only cause of cholera, he tries to show what other factors are concerned in the question. He points out, in a series of extensive statistics, that time and local predisposition of the soil are the important factors in influencing an outbreak; that dryness and a low position of the soil water were present during the summer of 1892, in Hamburg; without these the comma bacillus could not have developed. It may be remarked that the same heat, dryness and low state of soil water were general throughout Germany during this period. Why did the Hamburg epidemic not become general in Germany? An important fact has been brought out by Wallichs, viz.: In certain long streets, half belonging to Hamburg and half to Altona, the epidemic was quite general on the Hamburg side, whereas but few cases occurred on the Altona side. As Wallichs points out, nothing but the difference in water supply can account for this fact. Pettenkofer speaks harshly of the many regulations taken during the past year for the prevention of the spread of the comma bacillus. Inasmuch as he admits that the comma bacillus is a factor in the causation of the disease, and inasmuch as we are somewhat helpless in the regulation of the local predisposition of the soil, we cannot see why Pettenkofer objects to measures which prevent the spread of comma bacillus. Certainly the wonderful results of the regulations, which have been general throughout Germany during the past half year, show how, by proper precautions, the spread of this dreadful disease may, at least in part, be prevented.

CURRENT LITERATURE REVIEWED.

THE MONTREAL MEDICAL JOURNAL for March contains a paper by Dr. George E. Armstrong on

Prostatectomy

in which the author reports four cases with two deaths. He agrees with the following propositions advanced by Mr. A. F. McGill at the meeting of the British Medical Association in 1889:

1. That prostatic enlargements which give rise to urinary symptoms are intravesical and not rectal.
2. That retention is caused by a valve-like action of the intravesical prostate, the urethral orifice being closed more or less completely by the contraction of the bladder on its contents.
3. That in many cases self-catheterism is the only treatment required.
4. That when catheter treatment fails or is unavailable, more radical measures are necessary.
5. That this treatment, to be effectual, should for a time thoroughly drain the bladder and permanently remove the cause of the obstruction.
6. That these two indications are best fulfilled by a supra-pubic rather than a urethral or perineal operation.

The author finds that the supra-pubic entrance gives the operator perfect command over the seat of disease, and also sufficient drainage to the diseased bladder. Hemorrhage is troublesome, and often requires more efficient control than is given by hot water. In three cases, the author packed the bed from which the tumor was shelled out with sticky iodoform gauze. This was very satisfactory. The gauze was removed in twenty-four to forty-eight hours. The packing is in front of the orifices of the ureters and thus does not stop the flow of urine into the bladder. "The mortality attending this operation limits its peformance to the few advanced cases unrelieved by any other method. On the other hand, delay which allows the patient to drift along until general deterioration and changes in the kidneys are so far advanced as to render operative treatment hazardous, is unscientific and unsurgical." The author does not see anything in the operation itself, performed on a man whose other organs are healthy, that should make it fatal; and believes that increased knowledge of the pathology of prostatic disease and its sequellæ, with an improved technique, will enable us to afford relief to a greater number of this class of patients in future than at present.

Dr. J. G. Adami presents a report as to the microscopical appearances of three of the tumors removed by Dr. Armstrong. He regards them as a true hypertrophy of the prostatic tissue, an hypertrophy affecting all the elements of the gland. The condition may be spoken of as a partial or localized hypertrophy of the prostate.

Dr. H. S. Birkett contributes a paper on

Empyema of the Antrum of Highmore,

reporting seven cases. The causation, symptoms and differential diagnosis of the disease are discussed in a most thorough manner. The treatment advocated is as follows: "Having decided which tooth is most likely to be the cause, presuming that dental caries or alveolar periostitis has been the exciting cause, this one is to be extracted—by preference the first molar. Then the drill should be inserted into the posterior socket and made to penetrate the antrum." Should, however, there be a fistulous opening in the gum, this spot should be selected. The cavity is syringed out with an antiseptic solution—preferably bichloride, 1 to 5,000. A drainage tube is then inserted, care being taken that the tube does not extend too far within the antrum to allow the ready escape of the pus. The treatment now consists in washing out the cavity three times daily with an antiseptic solution, preferably Listerine (℥i to ℥i) as there is danger from poisoning with any stronger antiseptic. In chronic cases, where there is a pyogenic membrane, the cavity may be injected with peroxide of hydrogen every other day.

Dr. J. D. Balfour contributes a paper on the "Administration of Chloroform and the Dangers incident thereto," an abstract of which will be found in our next issue.

THE CHICAGO CLINICAL REVIEW FOR MARCH.

In an article on "Brain Surgery," Dr. F. Shaefer reports a case of injury received five years ago and which was followed three years later by convulsions and paralysis. At the operation, a blood clot was found under the dura mater and removed. The patient recovered from the operation and at the time of the communication is reported as improving.

Dr. F. E. Waxham gives his "Impressions of Albuquerque, N. M., as a health resort." As a winter residence it presents many advantages to a large class of tubercular patients and, if the disease is not too far advanced, they may expect much benefit from this extremely dry, rare climate. Feeble and emaciated patients do better in a warmer climate and a lower altitude. The summer temperature at Albuquerque is too high for most patients, though some do well by going to the mountains in the vicinity. He believes that while Colorado offers greater attractions as a summer resort, New Mexico as a winter residence is almost unequalled on account of the extreme dryness, purity and rarity of its atmosphere.

The results of the

Recent Vaginal Oophorectomies

performed by Prof. Henry T. Byford are reported by Dr. J. T. Binkley. Four cases in all are reported.

1, Prolapse of both ovaries with chronic ovaritis.

2, Ovarian abscess and pyosalpinx, left side.

3, Hydrosalpinx, inflammation, hyperplasia of right ovary.

4, Small right ovarian tumor, left ovaritis, double salpingitis, and universal adhesions.

The patients all recovered. "Dr. Byford prefers removing diseased ovaries and tubes, small ovarian tumors, through the vagina, because of the safety of the method and the absence of all trouble from hernia or abdominal fistulæ. All septic changes and retained secretions that would have resulted in general peritonitis have invariably been relieved by discharge through the vaginal incision, either spontaneously or after pushing the finger through the cicatrix, except in one case of pyosalpinx, in which the infected ligature ulcerated into the rectum."

Dr. George W. Newton reports a case of

Multiple Fracture of six bones of the Face and Destruction of the Right Eye.

The injury consisted of a double fracture of the inferior maxilla, a compound comminuted fracture of both nasal bones, a compound comminuted fracture of the superior maxilla, fracture of right malar bone and fracture of right palate bone, also total destruction of right eyeball. Hemorrhage, which was profuse, was controlled by ice and hypodermic injections of ergotine. Hot fomentations were applied for twenty-four hours, at the end of which time the patient was chloroformed and the injured eye enucleated; the fragments of inferior maxilla, wired and a fragment of superior maxilla which was hanging by only a shred of mucous membrane, dissected out. For the first three days the patient was nourished by enemata, after that he could take liquid foods. At the end of six weeks the wire was removed from the inferior maxilla, the union being firm, as it was in the rest of the bones. The face had assumed its natural appearance.

Dr. Charles Warrington Earle discusses "Retroversion and Retroflexion of the Pregnant Uterus." The treatment consists in the avoidance of any great exertion. The urine should be voided with great regularity. If spontaneous replacement does not take place, careful manual reposition must be resorted to with the patient in the knee chest position, the fingers being the best repositor. After the replacement the patient should remain in bed or should wear a pessary till it is certain that the uterus is above the promontory of the sacrum and will remain so.

Dr. Henry M. Lyman reports two cases from the Neurological Clinic of the Rush Medical College. The first is a case of "Convulsive Tic." At sixteen the patient received a scalp wound in the region of the fissure of Rolando from which he was unconscious for two weeks. Four years later the irregular muscular movements commenced. Two years ago the patient was trephined over the point of injury without relief. Dr. Lyman advised suspension of the patient by Sayre's apparatus for a slight increased length of time each day.

The second case is one of "Insular Sclerosis of the Lateral Spinal Columns," coming on after working late at night in a draught. The treatment advised was iodide of potash in small doses, rest and general care, and the galvanic current of a strength of five milliamperes for about three minutes every other day.

The other papers in this month's issue are: "Dislocation of the Crystalline Lens," by Dr. Cassius D. Wescott; "Selections from my Case Book," by Dr. E. J. Gardiner; and "Cerebral Hemorrhage," by Dr. Sanger Brown.

THE CHICAGO MEDICAL RECORDER

for March contains an article by Dr. Edwin J. Kuh.

A Topical Treatment of Bronchitis.

Direct inhalation is applied from a Davidson atomizer producing a very fine continuous spray; the patient being instructed to make as long an expiration as possible, then begin inhaling gently and slowly, and then more rapidly and deeply. The formula which has given the author the best results consists of menthol, one to two per cent.; creosote, one per cent.; camphor, one-half to one per cent.; oil of eucalyptus, two per cent.; oil of pine needles, two per cent., in albolene or benzoinol. The average quantity to be inhaled is two drachms; beyond that the patient gags and the stomach revolts. The author reports good results in old cases of chronic bronchitis, in bronchitis complicating chronic nephritis and diabetes. It is also an excellent palliative in hay fever.

Dr. F. C. Hotz presents the "Report of a case of Thiersch's Skin Grafting on the Conjunctiva." The case reported is one in which the patient lost his eye from flying glass from a broken bottle. The scar tissue, which formed after the removal of the eye, prevented his wearing an artificial one and the operation was performed to enable him to do so. The grafts were cut by passing a razor just below the cuticle, cutting through the tops of the papillæ; they are truly skin shavings, are almost as thin as mucous membrane, but being taken from a firmer texture they have a greater resistance and greater vitality than mucous membrane. The reporter has used the method with success in cases of symblepharon and in cases of large pterygium.

Dr. Christian Fenger reports a number of "Operations on the Kidney," including two nephrectomies for carcinoma with one death. Three cases of nepro-lithotomy, all of which recovered. Two cases of nephrotomy for stone in the kidney, with one death. One case of nephrectomy for traumatic rupture of the kidney; recovery. He also reports one operation for stone in the ureter, with recovery. One exploratory operation for stone in the ureter; recovery. Two cases of stricture of the ureter, one of which was traumatic; both recovered. The reporter also discusses

the operation for pyonephrosis, giving the technique.

Dr. Edmund Andrews discusses the "Management of certain cases of Recurrent Urinary Calculi without cutting or crushing," reporting a number of cases in which he succeeded in pumping the stone out of the bladder. He also describes a "New Clamp for bony union of Fractured Patella" which is a modification of the principle of the well known Malgaigne hooks. A cut of the instrument is given in the paper.

Dr. Charles Warrington Earle contributes a paper on "Mediastinal Abscess and Tubercular Bronchinal Glands," reporting cases.

The papers in this issue were read in the Chicago Medical and Chicago Pathological Societies.

PERISCOPE.

MEDICINE.

Quinine in the Treatment of Wounds.

Dr. Isidor Alfoldi (*Kozegeszegugyi Kalauz.*) recommends quinine for the treatment of wounds. The first case in which he employed it was one where in consequence of severe contusion of the foot, amputation of the leg had become necessary, and where, in spite of the most rigid antisepsis, several days after the operation the edges of the wounds and the parts surrounding them had been colored blue and showed no tendency toward healing, the flaps themselves becoming cold. This condition grew rapidly worse, and despite the usual antiseptic measures, gangrene appeared imminent. By the application of cotton wads saturated with a one per cent. solution of quinine sulphate, gangrene was prevented, the wound daily assumed a more healthy appearance, and healed in the normal time.

The second case was in a child of six months who had a cavernous new-growth in in the right arm, which Dr. Alfoldi treated at his clinic with Vienna caustic. A week later the wound was gangrenous in consequence of negligence, and extensive erysipelas was present. After washing the wound with a one per cent. solution of quinine sulphate and applying the dressing of gauze and cotton impregnated with the same solution, the wound became perfectly clean and presented red granulations, the erysipelas disappeared, and a rapid cure survened.

The third case was one with numerous soft chancres about the glans, which were dusted every other day with quinine sulphate. After four dressings the ulcers were healed.

The author states that infected wounds showing no tendency toward cure deterge and heal more rapidly under the influence of quinine than by the application of corrosive sublimate or of iodoform; and that simple wounds heal strikingly fast.—*Merck's Bull.*

Salicylate of Bismuth in Infantile Diarrhœs.

Mikhnevitch (*Med. Obozrenie*, No. 6, 1892), having tried the salicylate of bismuth in fifty cases of diarrhœa in infants under two years of age, reports that of the number only two died (a boy eight months with pelvic suppuration consecutive to intractable colitis, and an infant of five months, born prematurely and exceedingly sickly at its birth. The following formula is recommended:

℞ Bismuthi salicylici.....gr. xxiv.
Gummi arabici.....ʒ j
Sacch. albi.....ʒ jss.
Terendo adde aq. dest.....ʒ ij
Fiat lac, tum adde aq. dest...ʒ iv.
M. D. S.

The bottle to be kept in cold water or ice, and to be shaken well before use. One or two teaspoonfuls to be given from three to six times daily. Each teaspoonful of the mixture contains about half a grain of the salicylate, which constitutes a normal dose (three or four times daily) for an infant of from six to eight months old. In cases of offensive diarrhœa the administration should be preceded by a dose of castor oil. The bismuth salt should be given regularly until the diarrhœa has completely subsided. It must be kept in mind, however, that in large doses the remedy is apt to induce perspiration with consecutive weakness (especially in exhausted children), hence a corresponding reduction of the dose may be necessary. In acute cases the remedy is useless, but in all of a week's standing or longer its effects are said to be excellent.

SURGERY.

Bow-Legs.

Dr. A. E. Hoadley (*Chicago Clinical Review*) says:

Rugged and rapid development produce bow-legs, and more commonly straight legs, which will uniformly correct themselves without assistance.

The severe forms of ordinary bow-legs, especially where the joint itself partakes largely of the deformity, will require treatment by restraining and corrective force.

The prognosis, in the ordinary forms of bow-legs, is very favorable under the influence of mild corrective force.

The prognosis in rachitic bow-legs is unfavorable. When this condition is of long standing it is practically not amenable to treatment by gradual corrective force, and therefore should be corrected by osteotomy. The rachitis itself requires the most careful

and comprehensive constitutional treatment.

The anatomical arrangement of muscles favors the spontaneous correction of bow-legs, and the biceps is the most important in the exercise of this corrective force. In the opposite condition, or knock-knee, there are no opposing muscles that can act as correctors of the deformity.

The strong contrast between these two conditions, bow-legs with a tendency to recovery, and knock-knee with a tendency to progression and difficulty of correction, is due entirely to the anatomical arrangement of the muscles.

GYNECOLOGY.

Rapid Method of Locating Intestinal Wounds.

Dr. D. D. Crowley (*Occidental Medical Times*) says:

Large fæcal accumulations materially hinder the insufflation of hydrogen gas, usually increasing the time required to pass the ileo-cæcal valve by five to six minutes.

Fæcal accumulations also obstruct the point of the rectal tube, and may at times prevent the gas passing into the rectum.

Insufflation of hydrogen gas does not materially hinder the suturing of the abdominal wall, nor does it force the intestines from the abdomen during insufflation, as it is often stated.

The carbolized solution employed answers two purposes; by removing blood and other extraneous matters, and by acting as an element through which the escape of gas from an intestinal wound becomes visible.

The use of gas alone reduces the time required in exploring the abdomen for intestinal wounds at least 75 per cent., but with the addition of an antiseptic solution the time can be reduced 90 per cent.

With gas and fluid no difficulty is experienced in ascertaining the presence of the smallest wound in the intestine.

A wound ¼ to 1 inch or more in length, in any part of stomach, may be located by these means.

A small wound, ¼ inch in length, on the posterior surface, or a small valvular puncture in any part of the stomach, is not always readily located by the use of gas and fluid; but these two exceptions, as I have ascertained, usually do not require surgical interference.—*American Lancet.*

Ectopic Gestation.

Dr. James W. Ross, of Toronto, (*American Gynecological Journal*) writes an interesting article on the above condition. He sums up the causes of extra uterine gestation as follows:

1. Malformation of the internal genital organs.
2. Occlusion of the inner end of the Fallopian tube.
3. Pressure on the tube or obstruction of its lumen by fibroid tumors.
4. Gonorrhœal or other salpingitis.

The symptoms of disease before rupture are:

History of Labors.—In most cases there had been a considerable period of sterility preceding the ectopic gestation;

History of Tubal or Pelvic Disease.—This will usually have been present. The history often shows that the patient had a bad miscarriage some time before, or a supposed recent miscarriage.

MENSTRUAL HISTORY.—May, perhaps, have missed a month, or a period has been anticipated, scanty or delayed a day or two. Then irregular discharges of blood have begun, and sometimes been so severe and dangerous to the patient as to require plugging. They are like the pains of a miscarriage, and sometimes these hemorrhages will come on two, three, or four times in a month. In some they will be almost continuous.

This discharge, with the passage of decidua, makes the patient assert positively that she has had a miscarriage.

Pain.—Some have no pain. Others have dysuria, or frequent desire to micturate, a desire to strain, a feeling as if something were coming down. Pains may be paroxysmal, like labor pains, or may be accompanied by a gush or a discharge of blood.

Breasts.—Some have shooting pains in the breasts with a hot feeling. Breasts may tinge and feel full. Milk may be present.

Nausea.—Evidently not a reliable symptom.

Examination.—Vagina may be of a purple color. The cervix, perhaps, is soft and patulous. Uterus may be pressed forwards or backwards, to one side or the other. An irregular swelling that feels knotty and boggy will be found in its neighborhood. Some say the tumor may pulsate. No placental souffle can be made out at this early period, even with the stethoscope in the vagina.

ARMY AND NAVY.

U. S. ARMY, FROM APRIL 2, 1893, TO APRIL 8, 1893.

By direction of the Secretary of War Major Augustus A. De Loffre, surgeon, will be relieved from duty at Columbus Barracks, Ohio, upon receipt of this order, and will report in person to commanding officer, Fort Logan, Colorado, for duty as post surgeon at that Station.

The leave of absence granted Captain Edwin F. Gardner, Assistant Surgeon U. S. Army, for seven days, is extended twenty-three days.

Excursions to Washington.

Personally conducted tours to Washington have been arranged via Royal Blue Line, to be run at frequent intervals from New York and Philadelphia to Washington. The next excursion will be on April 6th. For programme, describing these tours, write to Thos. Cook & Son, Agents B. & O. R. R., 261 and 1225 Broadway, New York, or 332 Washington Street, Boston Mass.